Why more roads are using **off-track** equipment to clear derailments . . . p. 19

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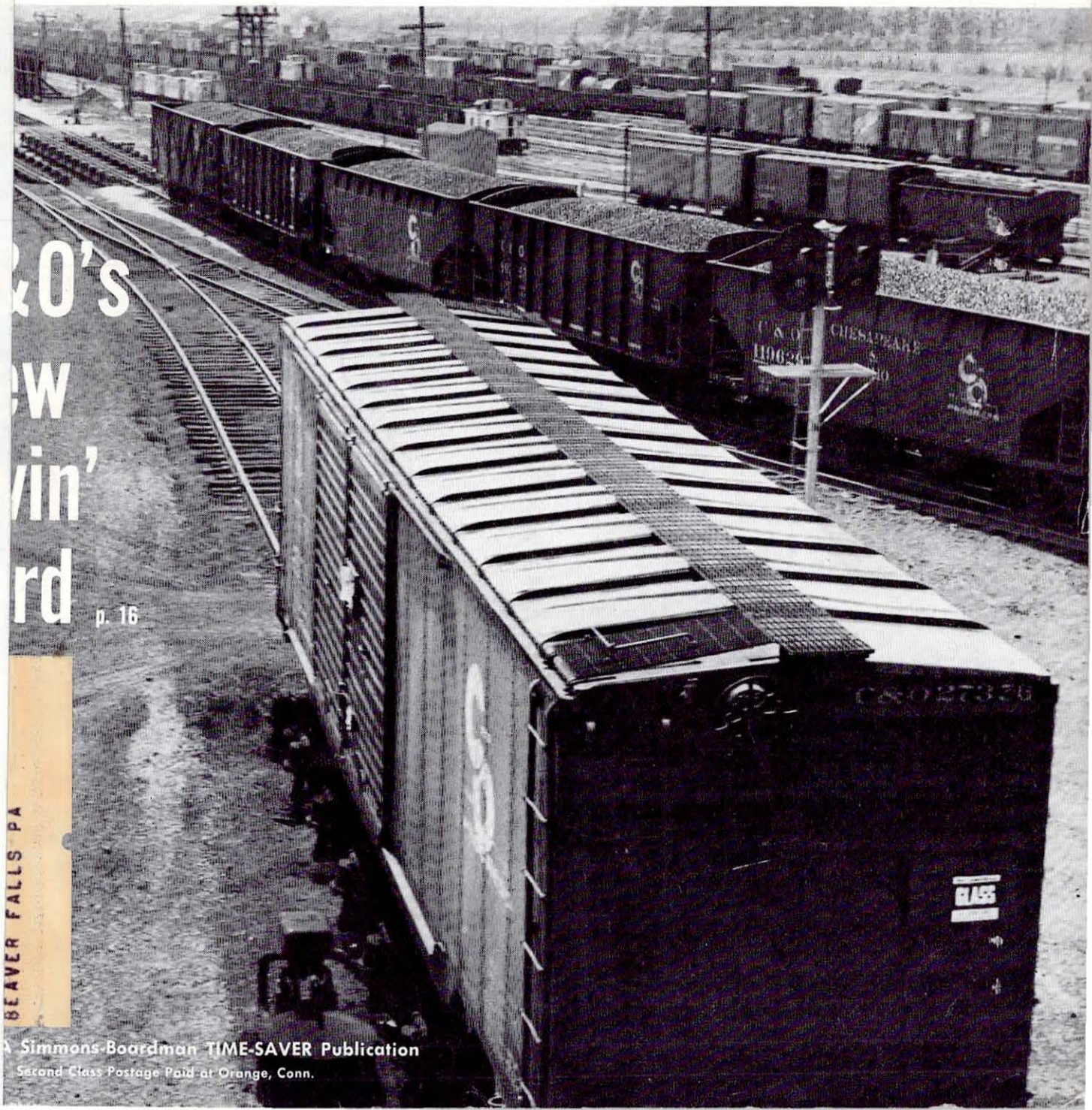
RAILWAY AGE WEEKLY



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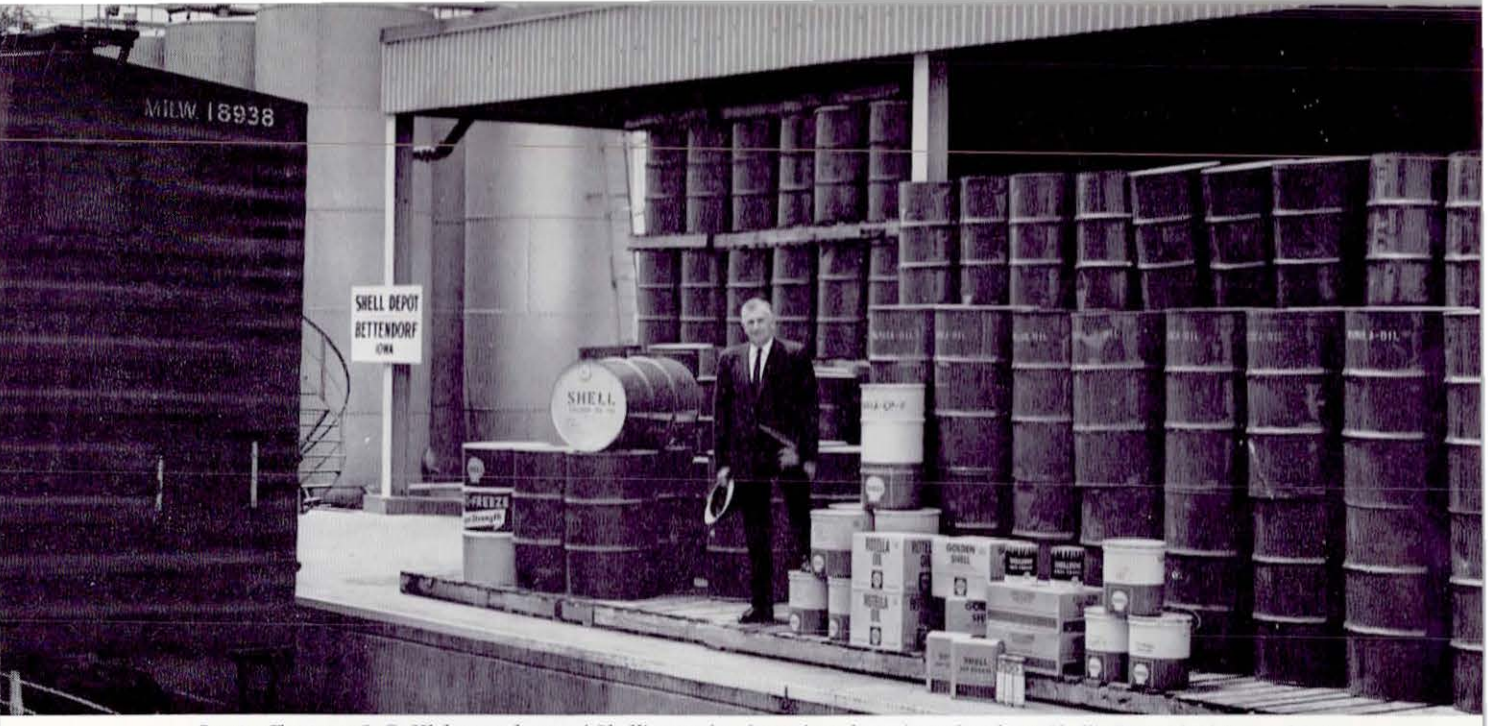

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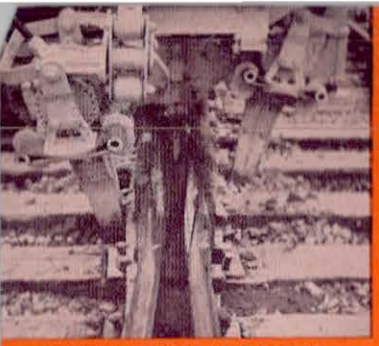

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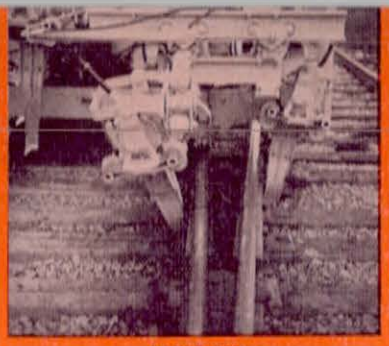

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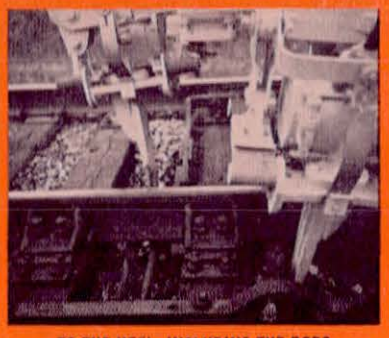
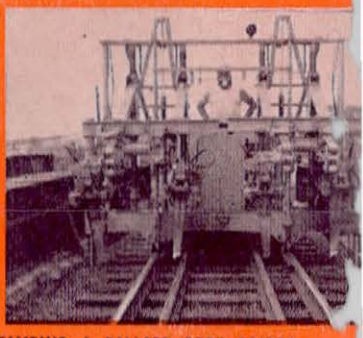


TO THE HEEL, INCLUDING THE RODS



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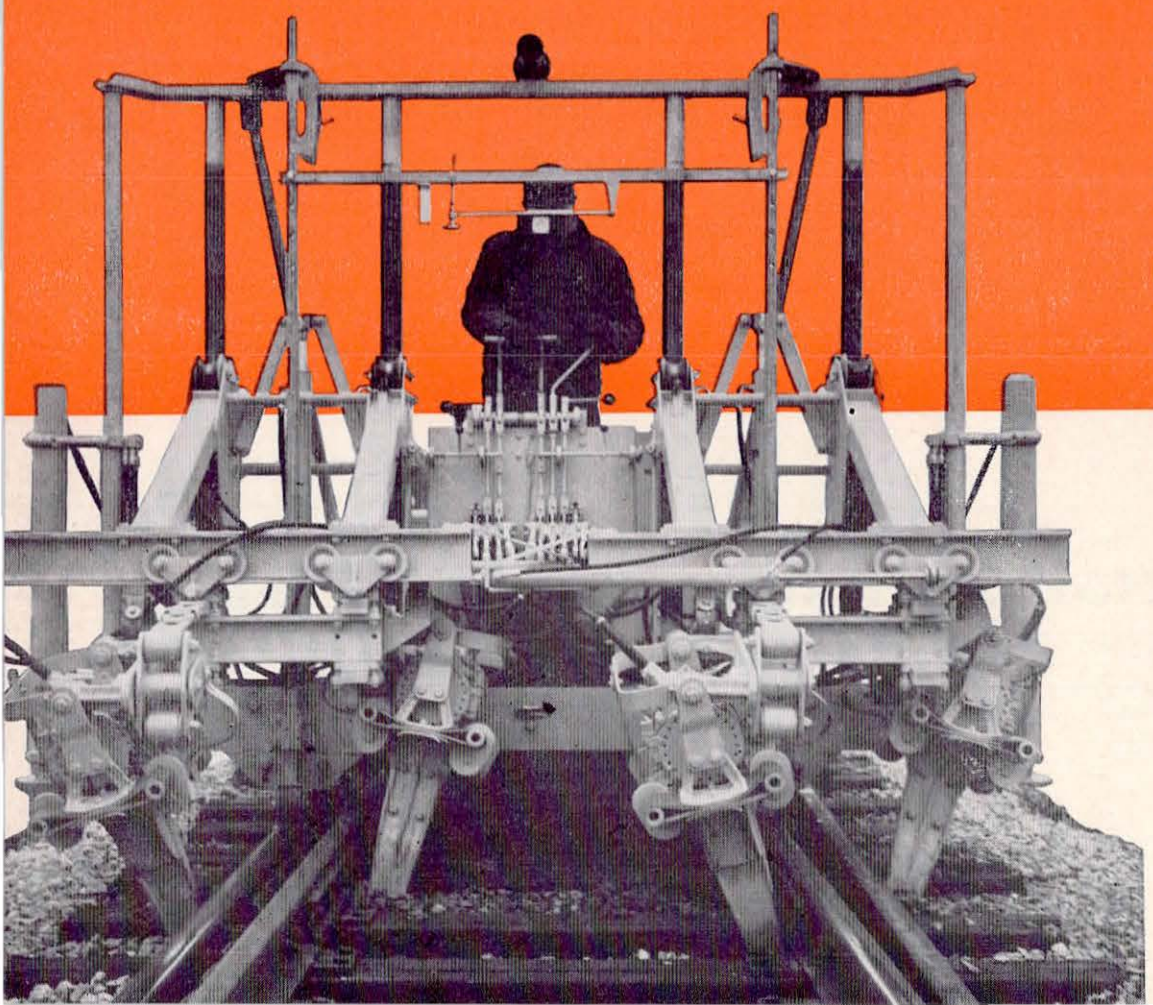

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RAILWAY AGE

WEEK AT A GLANCE

July 2, 1962 • Vol. 153, No. 1

Mediation fails in work-rules dispute

A showdown in the long and bitter fight moved closer last week as both sides pondered a request by the National Mediation Board that the dispute be arbitrated .....p. 9

'Maintain ahead' to keep yards going

Preventive maintenance is one of the most important factors in securing continuously good operation of automatic retarder classification yards, a recent survey reveals p.14

Dual hump doubles C&O yard's capacity

Cost of the project at the Walbridge, Ohio, classification yard was $370,000, only a fraction of the cost of a new yard. Most work was done by company forces p.16

Off-track equipment clears derailments

The increasing use of off-track equipment, plus other modern developments for restoring track during emergencies, were described at the recent Railroad Superintendents' meeting p.19

ASME symposium charts fuel trends

The changing pattern of fuel consumption and transportation in the nation during the decade of the Fifties was analyzed at the New Brunswick, N.J., meeting.....p.21

Mechanical Division ups load limits 5%

Announcement that the increase will become effective Aug. 1 was a highlight of the division's annual meeting in Chicago last week..... p.28

Rough journey seen for transport bills

Congress has passed the fare-tax repealer—but there are indications that more controversial bills, now at the hearing stage, will find the going tough.....p.31

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WEEK AT A GLANCE

The Action Page—How to avert a recession

The country's businesses need more orders. Railroads could supply those orders if they were given the right to compete on equal terms with other forms of transportation.....p.34

Short and Significant

24,142 new freight cars were installed...

by Class I railroads during the 12 months ended May 31, 1962. During the same period, 78,234 cars were retired, according to the AAR's Car Service Division.

J.M. Symes, PRR chairman and chief executive officer . . .

will continue in both capacities beyond his 65th birthday, July 8, in order that he may "continue his leadership in formulating merger plans" involving PRR and New York Central.

New president of the Texas Mexican . . .

is J. W. Kraemer, formerly division superintendent of the Southern Pacific at San Antonio, Tex. He succeeds the late W. C. Beaman (RA, May 14, p. 37).

Creation of a 225,000-member brotherhood . . .

by consolidating the Conductors and the Brakeman has been stalled by ORC&B's rejection of the merger proposal "under the proposed terms."

Removal of minimum-rate regulation . . .

offers "the one cure which will enable the railroads to recapture traffic they have lost." C&NW Chairman Ben Heineman told a news conference in Baltimore June 28.

Current Statistics

Operating revenues	
3 mos., 1962	$2,295,749,272
3 mos., 1961	2,128,376,735
Operating expenses	
3 mos., 1962	1,830,377,994
3 mos., 1961	1,780,358,037
Taxes	
3 mos., 1962	257,685,487
3 mos., 1961	228,925,289
Net railway operating income	
3 mos., 1962	112,621,164
3 mos., 1961	23,354,922
Net income estimated	
3 mos., 1962	66,000,000
3 mos., 1961	D. 12,000,000
Carloadings revenue freight	
25 wks., 1962	13,783,391
25 wks., 1961	13,059,325
Freight cars on order	
June 1, 1962	13,778
June 1, 1961	13,964
Freight cars delivered	
5 mos., 1962	16,073
5 mos., 1961	15,640
Serviceable cars	
June 1, 1962	1,455,259
June 1, 1961	1,479,100
Cars awaiting repairs	
June 1, 1962	132,516
June 1, 1961	162,767

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Mediation Fails in Work-Rules Dispute

► **The Story at a Glance: The fuse on the explosive work rules dispute grew shorter last week, as mediation ground to a halt and negotiators began studying the NMB's request that they arbitrate the case.**

Arbitration was considered a remote possibility by most observers. And, if it is rejected, there are the strongest indications that the carriers will act quickly to implement their Section 6 notices on rules, as modified by the Presidential Railroad Commission report.

This would lead, in all probability, to a strike call—followed by the inevitable decision by the Administration on whether to create an Emergency Board to investigate the already-much-studied dispute.

This will be a week for marking time in the long, bitter work-rules fight. But the lull is not expected to lessen the pressures building up on the operating unions.

The carriers hinted strongly late last week that they'll accept arbitration of the case—provided a satisfactory agreement can be reached with the organizations.

The brotherhoods, meanwhile, withheld immediate comment on the Mediation Board's proffer—and it appeared likely that no official union reaction would come before the end of this week. Chiefs of the five organizations were scheduled to meet Friday, July 6, in Cleveland to discuss the board's proposal and, presumably, come to a decision.

Previous statements by several top union officers made it appear that arbitration will be rejected—but, as one brotherhood spokesman noted last week, "there's always the possibility of a miracle."

One union chief was quoted to the effect that "you don't arbitrate matters of life and death." Another top negotiator told a recent press conference that arbitration, if and when proffered, would definitely be rejected.

The offer of arbitration came last Wednesday, June 27, five days after mediation proceedings broke off with each side accusing the other of delaying, of refusing to budge from previously-stated positions.

The carriers asked for an end to mediation, contending that "despite the sincere and untiring efforts of the Mediation Board, it is obvious that no progress can be made by prolonging the present endeavors."

Union officers hotly denied they've been stalling. Charles Luna, assistant to the president of the BRT, said the organizations "have sought to bring the complex dispute to an equitable settlement by . . . trying to use the Commission's report as part of the bargaining process representing the railroads' position and [by] attempting to engage in fruitful mediation. . . ."

Mr. Luna also said the unions had set up subcommittees "to cover every major issue in dispute . . . [and] we have furnished the carriers with tentative proposals on self-propelled machines, inter-divisional runs, expenses away from home and short turnaround passenger service. We have yet to receive acknowledgement from the carriers or any proposal on these subjects."

The carriers' decision to seek a halt in mediation proceedings was their second move toward speeding the dispute toward a showdown. They withdrew from direct management-union discussions May 17, with the comment that the organizations "had steadfastly refused to come to grips with the subject."

This time, J. E. Wolfe, chairman of the Western Carriers Conference Committee, said the carriers again had not been able to come close to any agreement with the brotherhoods.

The railroads' action, he added, was "not a walkout but rather an indication of our unwillingness to participate in the proceeding because of delaying tactics which could not possibly produce effective results."

If arbitration is turned down and the Mediation Board steps out of the case, then the way would be clear for the carriers to put desired changes into effect. Such a carrier move would, in turn, then clear the way for a union strike notice (most, if not all, of the five operating unions have membership authority for such a move).

There is, of course, the emergency board procedure which could be invoked if the Mediation Board believes an emergency situation exists and if the President thinks likewise. This could shove any "action" timetable back a minimum of 60 days—30 days for the board to investigate and report and a 30-day period following, during which the parties are supposed to negotiate on the basis of the board's findings.

As Mediation Broke Down . . .

"It has at last become painfully clear that the unions intend to persist in their delaying tactics without any intention whatever of accepting any part of the recommendations of the Presidential Railroad Commission. . . . In fairness to the public, the railroads intend to proceed as promptly as possible to bring this matter to a conclusion under the provisions of the Railway Labor Act."

J. E. WOLFE, chairman of the Western Carriers Conference Committee.

"The carriers showed bad faith and acted prematurely. I had confidence that the dispute could be settled in direct negotiations."

R. E. DAVIDSON, grand chief engineer, BLE.

"The railroads will have trouble the day, the hour and the minute they try to place any part of the [Presidential Railroad Commission] report into effect without an agreement."

H. E. GILBERT, president, BLF&E.

WATCHING WASHINGTON WITH WALTER TAFT

● **A TRUCK RATE INNOVATION** has been cleared by the ICC—at least for a "reasonable test period." The innovation is the so-called constant charge on small shipments. It is based on weight and distance and disregards such classification principles as density and value.

ENCOURAGEMENT of rate innovations is recommended in President Kennedy's Transportation Message. The President suggested that Congress direct regulatory agencies to sanction "experimental freight rates" and "modifications and variations in existing systems of classification." Another recent ICC action along this line was its decision to reconsider the Soo Line's guaranteed rate—a rate innovation which the Commission condemned last December (RA, June 25, p. 10).

THE CONSTANT CHARGES were established by the truckers Feb. 1. They apply to shipments weighing less than 300 lb, the minimum being $5.66 on shipments of less than 50 lb moving distances up to 50 mi. They are part of a general rate increase made effective during the past year on traffic between New England and Middle Atlantic territories, and Central, Northwest and Southwestern territories. The Commission cleared the whole adjustment.

THE REPORT, by Commissioner Webb, was in I&S No. M-14704. It was accompanied by dissenting-in-part expressions from Chairman Murphy and Commissioners Tuggle and Herring. They would have condemned the constant-charge plan because it disregards conventional classification principles.

THE COMMISSION CONCEDED that it had no authority to exempt carriers from the duty of maintaining just and reasonable classifications. The majority report went on, however, to find reasonable the treatment of small shipments as a classification. That's based on evidence indicating that conventional classification factors, such as value and density, do not materially affect the cost of handling such shipments, the big factor being labor costs which account for about 80% of the handling expense. The constant charge is designed to recognize this.

CONCERN about the classification was also the basis of shipper opposition, which included that of the National Industrial Traffic League, the National Small Shipments Traffic Conference and the Eastern Industrial Traffic League. Other protestants were freight forwarders who claimed that destructive competition confronted them in situations where the constant charges cut rates on high-rated traffic. The railroads were not in the case.

AS TO THE SHIPPER OPPOSITION, the Commission recalled that shippers have supported, or not opposed, various rates which disregard some classification principles. These include all-commodity rates, piggyback rates, and REA Express' container rates.

THE FORWARDERS' CLAIM of "destructive competition" was dismissed with this comment: "As a matter of law, we do not believe that the rate structures of the carriers who provide the physical service, and which are otherwise lawful, should be tailored for the benefit of freight forwarders."

MEANWHILE, the Commission called the constant-charge plan "a bold and imaginative approach toward solving the chronic small-shipments problem." It noted the truckers' awareness that the plan has defects, and their offer to cooperate in making changes as the need becomes apparent. "We accept the offer," the Commission said, adding that after the "reasonable test period" it will entertain petitions for further hearing—or reopen the case on its own motion, "if the occasion warrants."

Radioactive-Proof Trains Proposed

Development of lead-shielded trains "capable of moving safely through radioactive wastelands" was proposed last week by Wayne M. Hoffman, executive vice president of the New York Central.

Warning that "the atom will not declare a moratorium on the necessity for movement," Mr. Hoffman said such trains could "save thousands of lives" in the event of a nuclear war.

"They might be used as mobile fallout shelters which could move out of underground storehouses, carrying food and water, to pick up isolated groups who otherwise might face death or mutilation," he explained. "And whole groups of people might be safely transported during the danger period to relatively undamaged regions, where they could be ready to start to work the moment fallout protection is no longer needed. This immediate migration of effective numbers of people to the places where machines and factories are still in working order might be the one thing that could preserve our national existence. . . .

"These trains could also safely transport huge quantities of fuel, which is adversely affected by fallout radiation. Truck transportation could not stand the weight of lead-shielding, and it would consume far too much of the fuel itself. And pipelines presently do not serve enough geographical points. Since food also is affected by radiation, lead-shielded trains might be the only efficient way to transport it. . . ."

Mr. Hoffman advanced the concept of a radioactive-proof train in a speech at Kansas City, Mo., June 25. He addressed a corporate officers' symposium sponsored jointly by the National Institute for Disaster Mobilization and the Missouri Division of Commerce and Industrial Development.

He proposed the creation, by President Kennedy, of a committee of business leaders from all basic industries to assist federal agencies in the preparation of plans for recovery from nuclear attack. Such a committee, he said, might include a transportation subcommittee which "would bring together the technicians, scientists and managers necessary for intensive work to overcome the special transportation difficulties that would arise after a nuclear attack." This subcommittee, Mr. Hoffman suggested, "might devise plans and specifications for trains shielded with lead [that] could be loaded with supplies and stored in underground shelters at strategic points."

Noting that much of the nation's

220,000 miles of railroad track will remain undamaged after an attack, Mr. Hoffman added: "All of the technology presently exists to operate trains by remote control over this vast system of trackage, and work should be started to develop and build such [lead-shielded] units for testing and ultimate use, if needed."

He concluded with this warning: "Time may be running short. We should not leave our defense to chance. The old saying, 'forewarned is forearmed,' will only be true for us if we heed the warnings that are sounding. Let us, through cooperative preparation, insure that we are indeed forearmed."

Mergers: New England's Role

New England railroads have been assured that they will not be forgotten by the Interstate Commerce Commission when current merger proposals come to the decision stage.

Commissioner Clyde E. Herring, addressing the 15th annual convention of the New England Conference of Public Utilities Commissioners at Whitefield, N.H., June 22, commented that "many of the railroads of the nation are attempting to alleviate their problems through mergers and unifications of control." He went on to say:

"So far, none of these important merger proposals directly involves New England railroads. The Interstate Commerce Act, however, requires the Commission to consider the effect upon the public interest and you may be assured that the interests of New England will be afforded careful consideration in connection with the proposed merger now before us."

Mr. Herring named no names, but he presumably referred to the New York Central-Pennsylvania consolidation proposal. New England's most hard-pressed carrier, the bankrupt New Haven, has formally petitioned to be included in any such consolidation. Central and Pennsylvania, however, favor a regional merger of New England roads to which the other emerging eastern systems would have equal access.

Mr. Herring found the transportation picture in New England "not a pleasant one," but "not totally dark."

On the minus side, he mentioned the displacement of former basic New England industries; the surplus of transportation that exists in the region (New England's 2,000 Class I, II, and III motor carriers represent "a concentration unduplicated elsewhere in this country," and many "are conducting marginal operations"); and the plight of the railroads, one of which (the New Haven) is in reorganization, and another of which (Boston & Maine) has incurred deficits in each year since 1957.

"It is obvious," he said, "that heroic action will be required to solve the problems of the principal New England railroads. Some shrinkage of plant may well be necessary, and certainly means must be found whereby the railroads will be relieved of the financial losses attendant upon the rendition of essential passenger services."

On the plus side, Mr. Herring noted the business pickup in New England, with its attendant increase in carloadings. He added: "One of the most significant factors existing in New England's favor is the nation-wide interest which has been aroused in your transportation problems. For what is happening in New England can also happen elsewhere, and what are your immediate problems today can be those of another region tomorrow. With public opinion as an ally, the possibilities of obtaining prompt relief clearly are enhanced."

Mr. Herring commented that "another bright spot is the fact that there are few 'gray area' operations being conducted in New England, in comparison to those found in other areas of the country."

But another speaker, President W. Jerome Strout of the Bangor & Aroostook, saw "gray area" transportation as a major factor in the New England carriers' plight. "It is not the common carrier truck that has made such inroads in our freight traffic," he asserted, "but the private carrier, the contract carrier, and the gypsy."

Declaring that there is room in the transportation pictures for all legitimate common carriers, Mr. Strout said the BAR "has already made its first move toward integrated transportation by publishing joint less than carload rates with Fox & Ginn, Inc., a Maine common carrier trucking firm." He described the move as "the first of its kind in the area" and said it has "added to our gross revenue without taking traffic from other railroads." The BAR president added:

"We believe that integrated transportation—connections between railroads and trucks, railroads and water carriers —is a significant trend. We believe that it can eliminate a great deal of destructive waste, competition between carriers, and that it will permit each carrier to seek its own level of prosperity according to the natural advantages it has to offer and the efficiency with which it operates."

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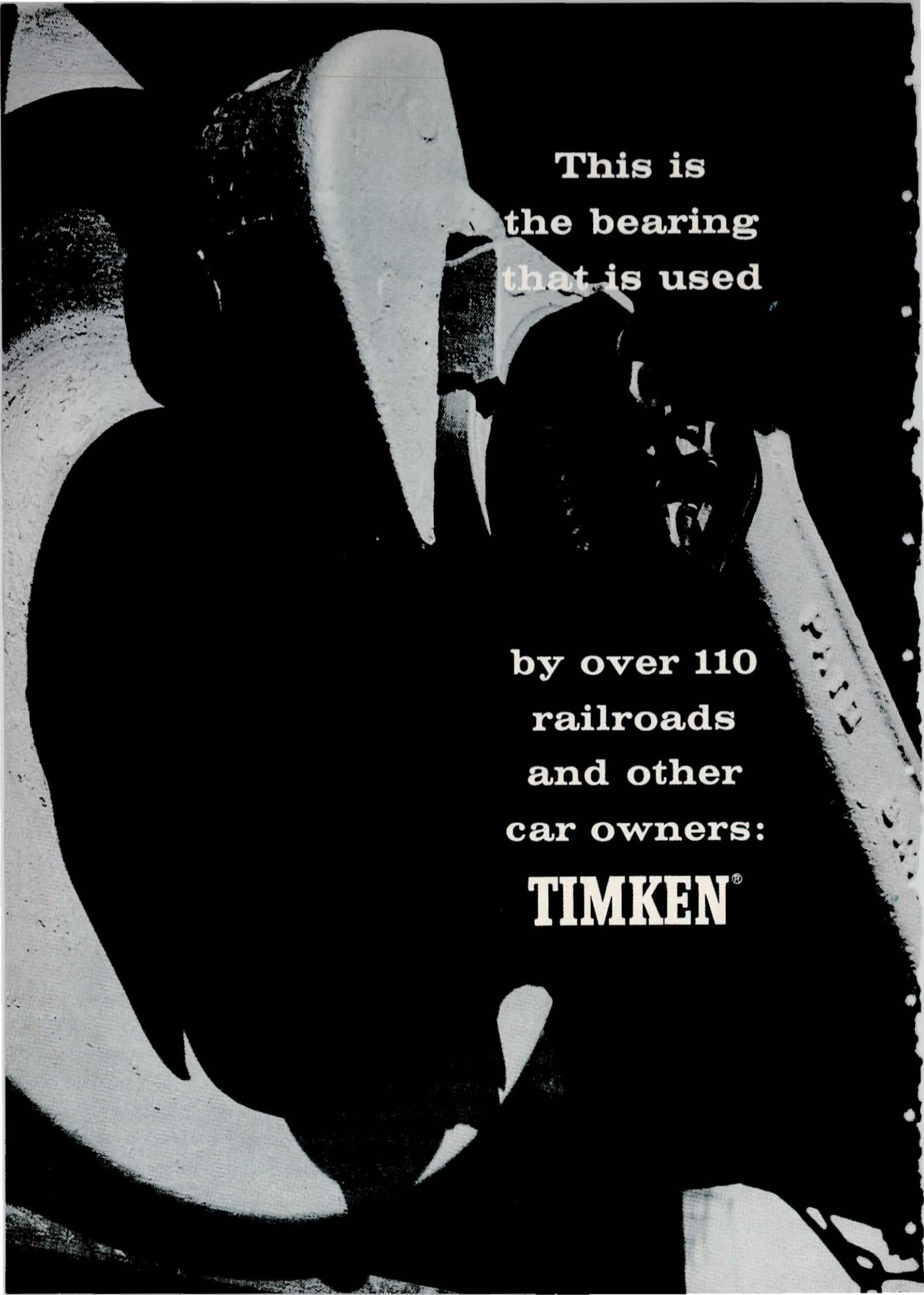
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RAILROADING AFTER HOURS WITH JIM LYNE

RUSSIAN EFFICIENCY—The belief seems to persist among a good many people of "conservative" opinions that Russia is not doing so well economically, compared to this country. Is this wishful thinking? To me, it has always seemed more prudent to overestimate a competitor than to underestimate him.

What we do know is that Russia's main expenditures for transportation are going into railroads rather than into highways; and that dollar-for-dollar (or ruble for ruble), you get more transportation performance for your money from railroads than you do from highways. A rich country can afford both railroads and highways, but, if thrift is a virtue (as it may well be in no-holds-barred international competition), then maybe the Russians are smarter than they get credit for.

There's this important difference between government expenditures in this country and in Russia: Here such expenditures are often made to win votes. In Russia the government does not have to win votes.

PROFESSOR W. J. CUNNINGHAM—One of the most influential leaders of this century, in the analytical approach to railroad problems, has vanished with the passing of Professor William J. Cunningham, who was the initial and long-time occupant of the James J. Hill chair of transportation at Harvard Business School (the post now held by Acting Dean George P. Baker). Professor Cunningham—who was as "professorial" (in the best sense of the term) as they come—did not, himself, hold an academic degree, which just goes to show how a really competent scholar can gain recognition in the higher echelons of academic life if he has what it takes.

LOW-PRICED TRANSIT—I was reading the other day in the Wall Street Journal of the urban transportation set-up in New Orleans, where one company sells the gas and the electricity and also supplies excellent bus service at the bargain price of 10¢ a ride. The company loses a little money on its bus operation, but is content to do so, believing that efficient and economical bus service helps its gas and electricity business.

One of these days we're going to see a real comparative study of transportation costs in an urban area, where all the costs (and not just those paid by the users) are figured in; and then maybe some rational decisions will be possible.

It's mighty hard for one form of transportation (e.g., railroad commuting) to try to collect all costs from direct customers, when other forms of transportation are picking up a large part of their expenses from other sources.

SLAVERY REDISCOVERED?—The Romans for centuries dominated the ancient world, and greatly increased its prosperity—especially through improved transportation, by highway and water. Rome's success as a producer of wealth was based upon the discovery of effective uses of slave labor.

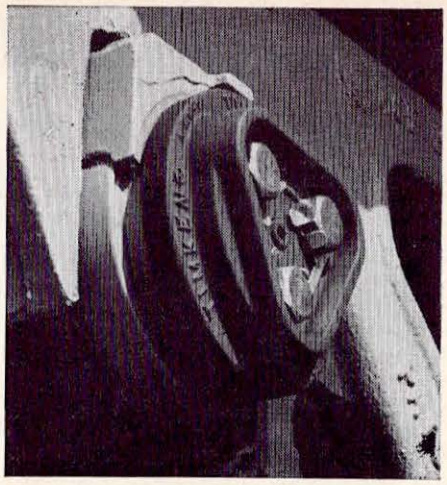
A railroad president, who is also an imaginative observer of political and economic trends, is inclined to believe that a modern version of slavery has been successfully introduced in this country.

The modern slaves, of course, are the taxpayers. They are not 100% slaves—as the oarsmen on Roman galleys were, but they are 90% slaves or 50% slaves or (at least) 20% slaves, depending on their tax bracket.

A large part of modern-day slave labor is used to provide a great many goods and services which would not be forthcoming in such profusion if the beneficiaries paid the full cost. Among such things are transportation plant for all types of movement except that by rail. Artificially aided by modern slave labor, these other forms of transportation are flourishing. The railroads, scrupulously refraining from seeking or accepting any coerced assistance, are languishing by comparison.

INCREASED CAR UTILIZATION—A good deal of the economy that railroads are expecting from such services as that of the "integral train" must come from more intensive utilization of equipment—that is, a freight car handling (say) 100 loads a year instead of (say) 20. The much higher utilization of jet planes, of course, explains how this extremely costly equipment can be substituted profitably for slower and much cheaper planes.

Now, however, a railroad executive with long service in the operating department, tells me that, with freight cars, his experience has been that maintenance costs vary, not with time, but with the number of loads handled; and that repairs to a car handling 100 loads a year will probably cost five times as much as those to a car producing 20 loaded movements annually. How about it?



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TAPERED ROLLER BEARINGS

'Maintain Ahead' to Keep Yards Going

► **The Story at a Glance: While most railroad men would agree that an automatic retarder classification yard more than pays for itself in reducing damage to lading and cutting yard time for cars, it is no magic facility that runs by itself. These yards contain much in the way of electronic signaling and communications equipment that must be maintained to high standards for continuous operation. A spot check of roads with automatic yards reveals that preventive maintenance is one of the most important factors in securing continuously good yard operation.**

How many men are required to maintain an automatic retarder classification yard? Anywhere from one to 18 men, according to replies received in a recent survey of railroads having automatic yards. The Milwaukee Road has three automatic retarder classification yards in service. Air Line Yard, Milwaukee, has 24 classification tracks and one bad order track. One maintainer is assigned who works eight hours a day, five days a week.

Bensenville consists of 70 classification tracks and one bad order track. A leading signal maintainer with a regular maintainer, and one assistant working eight hours a day, five days a week, are assigned to this yard. In addition, they are responsible for the maintenance of the signal apparatus on a one-spot repair track, two sets of highway crossing protection signals, shove signals in the departure yard, and a spring switch layout.

St. Paul (Pigs Eye Yard) has 39 classification tracks and one bad order track. A leading signal maintainer with a regular maintainer eight hours a day, five days a week, is assigned to this yard. In addition, they are responsible for the maintenance of a small remote control electric interlocking at the east end of the receiving yards, shove signals in the departure yard, and a remotely controlled drill signal to facilitate switching operations.

"At each retarder yard on the Frisco we employ four maintenance men," reports Communications and Signal Supervisor K. B. Gardner. "We have one signal maintainer working with an assistant signal maintainer on first trick, during daylight hours. One signal maintainer works alone on second trick, and the fourth man works as signal maintainer on a swing trick position. These men work under direct supervision of an assistant communications and signal supervisor."

The maintenance force in automatic classification yards on the Pennsylvania varies between seven and 18 men, depending on the size of the yard. The job titles include inspector telegraph and signals (T&S), foreman T&S, leading maintainer T&S, maintainer T&S, maintainer telegraph and telephone, signalman, and assistant maintainer T&S.

"We do not have any fully automatic classification yards. We do, however, have a 39-track semi-automatic pushbutton southward yard at Potomac Yard equipped with automatic switching, radar speed control and pushbutton exit speed selection. The northward yard at Potomac Yard is 49 tracks and equipped with manually operated retarders and power switches," says V. P. Shepardson, assistant chief engineer-signals and communications, Richmond, Fredericksburg & Potomac.

"We use gang maintenance on the RF&P and, consequently, our maintenance will vary month to month. For the month of December 1961 we averaged 19.2 man-hours per 24-hour day for the month. We attempt to do only required maintenance to prevent trouble and the maintenance work is determined by the foreman in charge of the gang," comments Mr. Shepardson.

P&LE'S Gateway yard

Pittsburgh & Lake Erie's Gateway classification yard at Youngstown, Ohio, consists of 59 electro-pneumatic remotely controlled switches in receiving yard, 212-ft master retarder, five groups with 90-ft per group of retardation at 35 classification tracks, electronic scale, and run-through alarm circuitry equipment on each of 35 inert retarders out of the classification yard.

The signal maintenance force consists of five signal maintainers, one retarder technician and one signal supervisor. The program of maintenance is 16 hours a day (four men on first trick and one man night trick) five days per week. In addition to the maintenance of equipment in the classification yard, this force maintains a mainline CTC control station and approximately eight miles of mainline CTC territory and crossing protection, and eight miles of signaled double-track on the Lake Erie & Eastern.

The Norfolk & Western's classification yard maintenance force at Portsmouth, Ohio, is made up of one car retarder foreman, one leading signal maintainer, one signal maintainer, one assistant maintainer and one helper. The assigned tour of duty is 7 a.m. to 4 p.m., with one hour for lunch, Monday through Friday. There is no one on duty the second and third shifts any day, and no force Saturday or Sunday. Also, there is no standby arrangement. "Preventive maintenance is extremely important for dependable around-the-clock operation such as ours," reports Norfolk & Western Maintenance Foreman D. F. Cobourn.

Pneumatic switch cylinders are removed from service once a year for an overhaul. The master retarder takes more of this work than do the group retarders, says Mr. Cobourn. Also, weather conditions affect the lubrication schedule of piston rods. Hard rain or high winds blowing dirt and cinders create a dry condition on exposed surfaces in a very short time. This also is true of the direct-acting switch cylinders.

"We check and adjust track circuits three times a year. Our switch circuit controllers are checked and adjusted two or three times a year, but where automatic switching circuits depend on these controllers for information, no attempt is made to hold to the ¼-in. adjustment so familiar to signal department employees," the N&W maintenance foreman reports.

The control levers on the machine in the tower come in for their share of preventive inspection and maintenance. The lever contacts are sturdy but require close adjustment to insure proper operation, especially for automatic switching. The automatic switching relays were placed in service in 1954 and so far have not required a great deal of maintenance. These units will be sent to the signal repair shop for reconditioning as it becomes necessary. "About the only items we let go until they fail are pot signals and hump signal electric lamps," states Mr. Cobourn.

"We work on a preventive maintenance program. We try to be maintainers — not trouble shooters," comments D. W. Shackley, superintendent signals and communications, Pittsburgh & Lake Erie.

"We have two two-way-radio-equipped, one-half-ton (utility body) maintenance trucks.

"We endeavor to furnish proper tools for the proper job. Our master retarder brake shoe adjustment is checked once per week. A meter alarm panel has been installed for the radar units and regulated power supplies. Other various routine maintenance schedules have been set up. The results of this program are

(*Continued on page 25*)

Here are the facts . . .

- SMALL SIZE—Single unit (illustrated), 3¾" x 12½" x 12½". Two unit (rec./trans.—speaker/mic.), 3⅜" x 12½" x 10⅛".
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Dual Hump

TWO CUTS CAN BE HUMPED SIMULTANEOUSLY at Chesapeake & Ohio's new dual-hump yard at Walbridge, Ohio. Serving coal trains en route to the Great Lakes and merchandise traffic southward, Walbridge hump capacity has been doubled, at a fraction of the cost of a new yard.

Chesapeake & Ohio's Walbridge, Ohio, classification yard is located just south of Toledo on the heavy traffic line between Columbus and Toledo. Serving coal trains bound for the Great Lakes transshipping facilities at the Presque Isle coal and ore docks in Toledo, and merchandise trains southbound from Michigan, Walbridge is a busy yard.

To increase yard capacity, C&O recently placed in operation at Walbridge, an unusual innovation—a dual hump. This has had the effect of doubling the capacity of the existing hump, thereby achieving the humping capacity of a

Doubles C&O Yard's Capacity

new yard at a fraction of the cost.

Until January 1961, C&O operated two classification yards in the Toledo area, but at that time the yard at Ottawa, Mich., north of Toledo, was abandoned and classification formerly performed at this point transferred to Walbridge Yard. This fact, coupled with an increase in business, made necessary an improvement in the Walbridge humping operation.

A second track was constructed paralleling the existing hump track. The dual hump now services the existing 41 coal and 27 manifest classification tracks, with the new track being connected to the 27 manifest classification tracks.

A scissors crossover was installed at the apex of the hump to permit flexibility of operation. Other modifications to insure maximum utilization of the dual hump included construction of two additional 160-car receiving tracks, making a total of eight, five of which are exclusively for coal, two for manifest, and one dual-purpose. It was also necessary to install an additional car retarder below the hump.

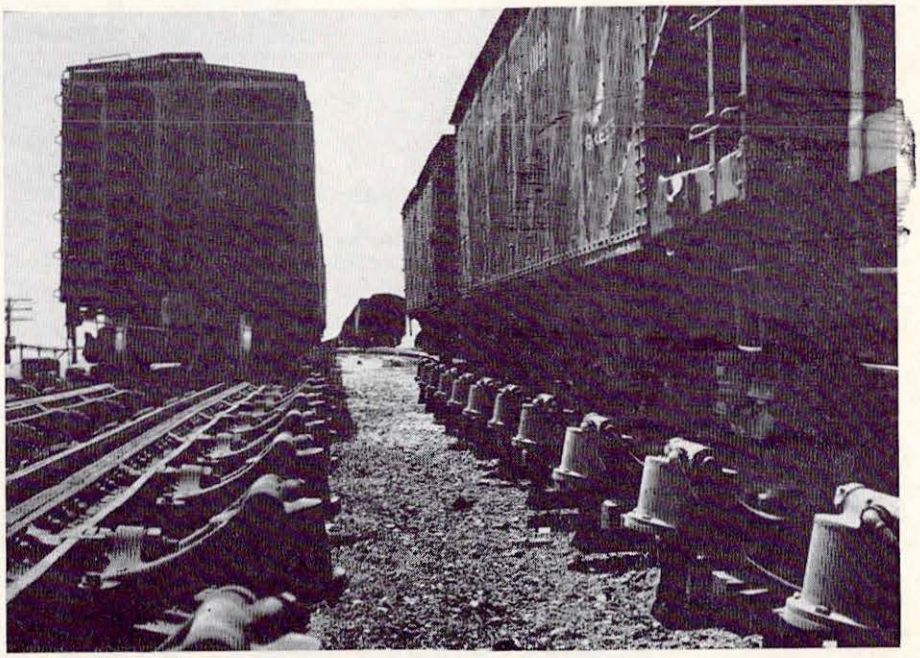
Before the new facility was completed, humping capacity at Walbridge was severely limited, with humping being frequently halted to permit other movements. Utilizing the dual hump, two cuts can be humped simultaneously.

The heaviest traffic at Walbridge is coal from on-line mines for transshipment to Great Lakes vessels at Presque Isle, which C&O reports is the largest coal-handling installation on the Lakes.

The novel dual hump was economical in construction cost and is proving to be efficient in operation, handling both the increase in business and the additional traffic of the consolidated operation. Cost of the Walbridge project was $370,000. With the exception of grading, all work was done by company forces. Improvements also include a glass-walled conductors' office building, from which instructions are radioed to switching locomotives in the yards.

In a recent eight-hour period, 800 cars were humped with sufficient idle time to establish definitely that approximately 2,500 cars can be humped per day. As R. M. Wiley, C&O Terminal superintendent at Walbridge, puts it, "There is no doubt that the alteration is resulting in improvement of efficiency of the terminal."

A SCISSORS CROSSOVER was installed at the apex of the hump to provide maximum flexibility with 41 coal and 27 manifest classification tracks.



AN ADDITIONAL CAR RETARDER was installed below the hump. Cost of the project was $370,000. Except grading, all work was done by company forces.

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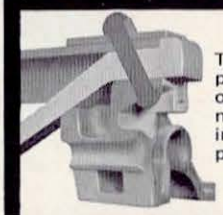
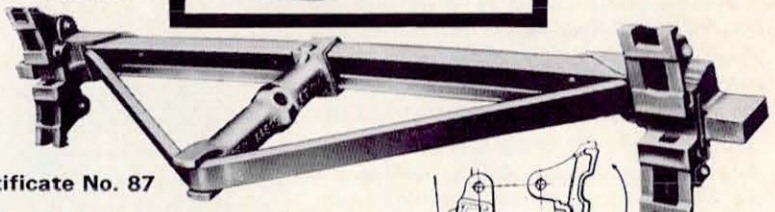


Tension strap pulls direct on compression member at inter-locking point.



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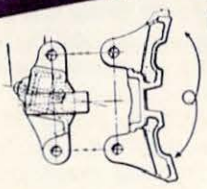

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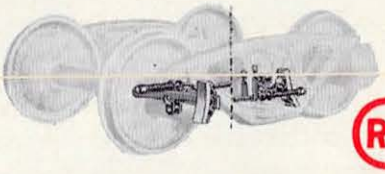

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VARIOUS TYPES of off-track equipment can be used at major as well as minor derailments, frequently obviating the need for calling out wrecker cranes. Many roads maintain records of nearby contractors and their equipment.

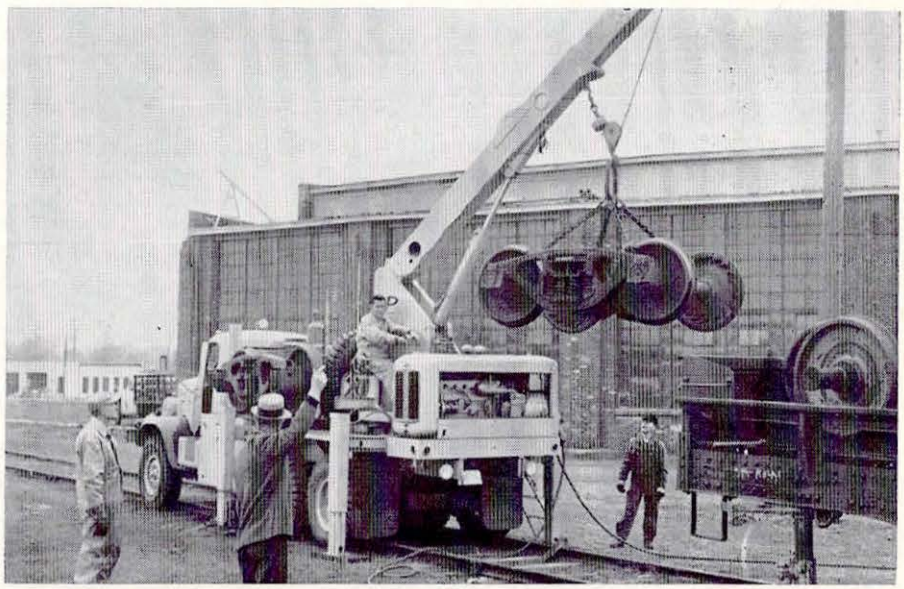
Off-Track Equipment Clears Derailments

► **The Story at a Glance: Today the wreck train is not necessarily the first piece of equipment dispatched to the site of a derailment or a washout. The men in charge now wait to learn if the train is needed, because today off-track equipment is taking a big part in picking up equipment and restoring track to service. This, and several other modern developments for restoring traffic during emergencies, were brought out at the recent meeting of the American Association of Railroad Superintendents.**

"The first thing to do after arriving at the scene of a derailment, washout or slide is to decide what action is to be taken—the cause is secondary," declares J. K. Leslie, Canadian Pacific assistant superintendent at Montreal. He made the statement at the recent 66th annual meeting of the American Association of Railroad Superintendents in Chicago. Mr. Leslie was supplementing information presented by a committee, of which he was chairman, in a report on "Modern Developments in Restoring Service After Derailments, Washouts and Other Interruptions to Traffic."

"Next, in order of importance," continued Mr. Leslie, "is to decide if a detour of trains is necessary." This decision involves assessment of the situation at the site by representatives of the maintenance-of-way, maintenance-of-equipment, signal, communications and operating departments as a basis for providing an estimate of the time required to get the line back into service. Mr. Leslie referred to a rule-of-thumb mentioned in his committee's report to the effect that, for every 12-hr period estimated to be necessary to open the line, two more hours should be added, because most such estimates are too optimistic.

The trend today, said Mr. Leslie, is not to dispatch a wreck train to the scene unless a responsible officer at the site reports it to be absolutely neces-



SPECIAL TRUCK is used by the C&O for minor derailments. This unit carries a spare car truck on its bed and has a telescoping boom with a capacity of 6 tons at an 8-ft radius, a 30,000-lb Braden front-mounted winch and an air compressor with four 50-ton air jacks.

sary. This new practice saves the cost of the crew and train operation in cases where bulldozers and other off-track equipment are sufficient. That is why, he added, it is important to have a list of available contractors, and their equipment, on hand for any type of emergency.

Another good thing to know in such an emergency, continued Mr. Leslie, is the location and number of cars on the division that are under load with material, such as rock or gravel, that can be used as fill. The number of empty cars on the division that are suitable for loading and dumping fill material also should be immediately determined.

Floods and washouts occasionally make it difficult for maintenance-of-way forces to get to the emergency site, said Mr. Leslie. At such times, the services of a helicopter can be used to advantage. He also reiterated the precaution cited in the committee report to the effect that, when the line has been cleared after a major derailment, the wreckers should be temporarily stationed in sidings or side tracks on either side of the point of derailment. They are then in position to protect against further trouble at that point.

Another committee member, J. P. Spears, superintendent on the Santa Fe at Newton, Kan., said his road had gone a step beyond keeping an up-to-date record of local contractors and their equipment. Each contractor, he said, has been furnished with a highway map on which the railroad is shown and the mile posts indicated. Hence, when the contractor is advised of the location of the emergency by mile post number, he can route his equipment to the site by the best highway route.

Another Santa Fe practice cited by Mr. Spears is that of shipping cars loaded with track panels to emergencies where shoo-flies must be built. In this connection, he added, a crane boom extension and a four-line sling are provided so the local crane can swing a track panel from the car to a point ahead, which results in more rapid construction.

Still another aid for use at derailments, which was developed by one of his work-equipment supervisors, was described by Mr. Spears. This is an A-frame with a pulley. A line is reeved through the pulley and the ends are attached to a bulldozer and the end of a derailed car. By pulling on the line, the car is raised and replaced on its truck and the track. Using such an arrangement, he said, 12 empty cars were picked up in about two hours.

Another committee member, A. S. Tabor, superintendent for the Norfolk & Western at Portsmouth, Ohio, said the trend toward use of off-track equipment at derailments has occurred because the wreckers are slow and in the way much of the time. He warned, however, that congestion can also develop with too much off-track equipment on the site. Some discretion must be used when calling out contractors and their equipment. A wreck master has his place at a derailment, Mr. Tabor stated, but he felt that an experienced trackman—a division engineer or a roadmaster—is the important man in such emergencies.

A new piece of equipment, which the Chesapeake & Ohio has found useful for rerailing cars having one truck off the rails, was described by B. G. Nash, the road's assistant regional manager at Detroit, and incoming president of the AARS. This unit is a special FWD truck mounted on six rubber-tired wheels that straddle the rails and can travel over the highways at speeds up to 40 mph.

Truck has a telescope boom

The truck is equipped with a boom telescoping from 12 to 18 ft, a hydraulic winch having a capacity of 6,000 lb, a spare truck and wheels on its truck-body platform, an air compressor and four 50-ton pneumatic jacks. The latter are set on a transverse base so that, after the end of a car is jacked up and the old truck pulled out by the winch, the jacks themselves can be jacked laterally on their bases to position the end of the car over the rails. The old truck, if undamaged, or the new one on the FWD truck, is then lifted by the truck's boom, set on the rails and rolled into position under the raised car end. Mr. Nash presented a color moving picture film of the unit in action.

An interesting experience in picking up a derailment was related by W. B. Groome, Union Pacific superintendent at Los Angeles and president of the AARS. The derailment occurred in a narrow cut about 8 ft. deep where it was impossible to move in off-track equipment. But, by positioning a 35-ton mobile crane at one edge of the cut where it could reach out and lift a car, and attaching a cable from the truck crane to a Caterpillar bulldozer, the damaged car was lifted and pulled out of the cut and set to one side.

Handling piggyback cars and trailer vans at derailments is a matter that is proving to be of concern to the superintendents. According to the committee report, the procedure ordinarily followed at derailments can cause heavy damage to trailers because they do not have the strength to withstand the twisting and lifting forces normally applied, and they have no good lifting points for hooks and cables. The committee suggested the use of cable dividers and equalizers and the possible use of a cutting torch for separating a trailer from its hitch on the flat car.

A committee member from the Western Pacific reported that, for handling trailers, he had improvised a cable spreader and cradle by using switch ties. The cradle encompasses the width, length and height of the van. This proved satisfactory, he said, for handling an aluminum trailer and its 40,000-lb payload.

Another member said he objects to the use of a cutting torch in the vicinity of a trailer, because the lading often becomes ignited and burns. From now on, he stated, he plans to use an ax for separating the van from its car hitch. He also described an instance in which the contents of a van became ignited by sparks made while dragging the van along the rails.

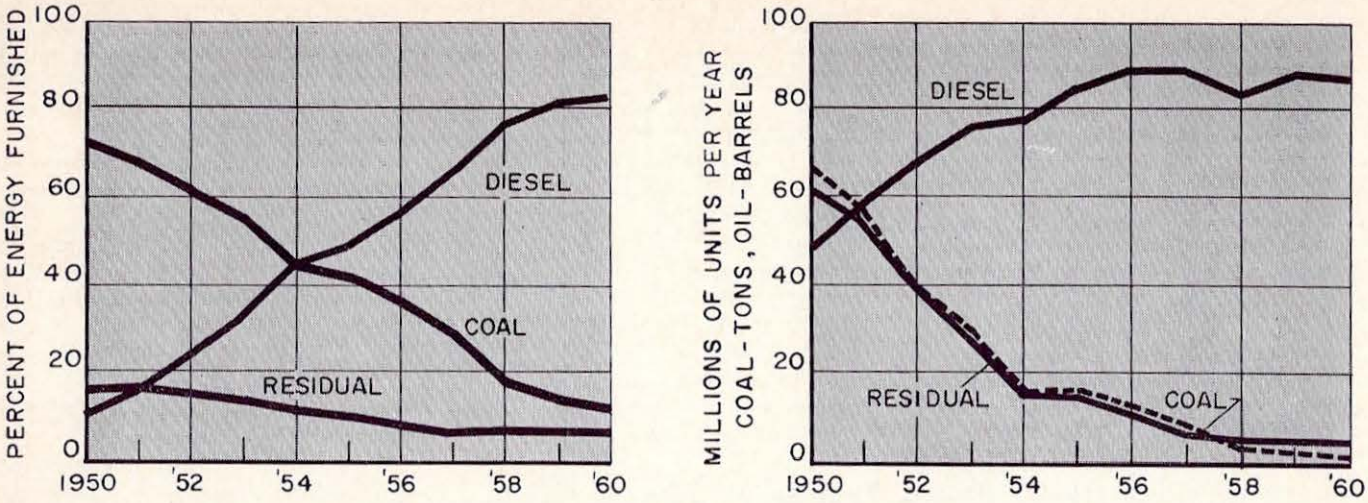
Further discussion of derailments of piggyback equipment emphasized the fact that the value of a van's contents should be given consideration before determining just how the van will be handled.

T. E. Johnson, Baltimore & Ohio superintendent at Pittsburgh, Pa., described an incident in which 20 derailed cars became wedged in a tunnel. Locomotive cranes were put to work at the ends of the tunnel but were found to be too slow in removing the wedged cars. D6, D8 and D9 Caterpillar bulldozers were then sent into the tunnel and were found to be effective in removing the cars, he said. The D9, being the heaviest bulldozer, was the most effective. However, because of its size and weight, this unit had to be carried over city streets on a low-boy. Using this equipment, the wreck was cleared up in 72 hr.

A. J. Powers, New Haven's superintendent of rules, expressed doubt about the wisdom of calling out contractors' equipment in all cases. He believes that some roads may find themselves time-slipped by their own operators.

Another derailment "tip" was advanced by C. C. Eldridge, Western Pacific assistant to superintendent of transportation. He pointed out that the supervisory officers called out at derailments were so dedicated that they too often stayed on duty beyond the limits of normal endurance. It is his opinion that superintendents should prescribe rest periods for such officers.

This prompted another member to question Mr. Johnson on the work periods of his officers during the 72 hr required for clearing up the tunnel derailment. He replied that, after the men had been on duty 16 hr, alternating rest and work periods of 12 hr were put into effect for them.



ENERGY SOURCES of Class I railroads are shown in chart at left; fuel consumption is shown at right.

ASME Symposium Charts Fuel Trends

Domestic transportation virtually completed its shift from coal to petroleum as the source of motive energy during the decade 1950-1960.

In 1949, coal supplied 22.6% of the energy used by all modes of public and private transport. In 1959, coal's share was down to 1%. The decade had seen railroads decrease their daily energy consumption by 75%. This decrease, which occurred during an interval when total railroad ton-miles dropped only 2.7%, reflected the efficiency of the diesel-electric locomotive.

These trends during the Fifties were discussed by C. E. Moser and J. W. Weiland of the Texaco Research Center at a recent Fuels Symposium in New Brunswick, N.J. The symposium was sponsored by the American Society of Mechanical Engineers. In their discussion, Messrs. Moser and Weiland considered each of the different types of transportation and its fuel consumption, including automobiles, trucks, buses, commercial and private aircraft, and private and commercial ships and boats.

Among other speakers at the Symposium was W. T. Thagard, of the Texas Eastern Transmission Corp., who reported on the increase in transportation of fuel for all purposes during the Fifties. Fuels, according to Mr. Thagard, account for a significant portion of the total volume of material handled by all principle modes of transportation except the airlines.

During the 1950's railroads lost passenger and freight traffic, but improved their efficiency of operation through dieselization, Messrs. Moser and Weiland pointed out. These factors resulted in a net loss of market for liquid fuel to the petroleum industry as well as for solid fuel to the coal industry. Increased requirements for diesel fuel (and furnace oil) forced refiners to draw on a broader spectrum of petroleum stocks. Special processing, plus fuel additives, were required to maintain quality. Economy diesel fuels composed of blends of distillate and residual stocks were utilized by some railroads in spite of concomitant increased maintenance costs.

From the standpoint of the type of fuel and efficiency of fuel utilization, the pattern of railroad fuel consumption probably showed greater change in the Fifties than that of any other transportation medium. The change had a large impact on the coal and petroleum industries. The Texaco engineers said they based their study on Class I railroads and did not include electric locomotives "because they represent an essentially constant and small (less than 2%) component."

The 1950's saw almost complete replacement of the steam locomotive by the more efficient diesel-electric. Not only did diesels increase from about 35% to almost 96% of the total locomotives in use, but the total number of locomotives decreased by 11,000 units, or 27%. Combined passenger and freight-ton miles declined 2.7%.

Based on the energy requirements, the impact of railroad dieselization is even more apparent. Energy consumption, calculated from the heating value and quantities of fuels used, fell from 6.5 to 1.6 billion Btu/day, a decrease of 75%.

Not only has diesel fuel replaced coal, but also the residual fuel used in steam locomotives.

The amount of diesel fuel used in 1960 was only 1.4 times the amount of residual fuel used in 1950. Comparing total volume of diesel plus residual in 1950 and 1960, the oil industry lost an annual market for about 16 million barrels of oil.

Diesels fuels were originally composed of straight-run distillates. However, by 1950 the increased demand for diesel fuel, along with the rapid growth in the requirement for domestic furnace oil of the same general boiling range as distillate diesel fuels, resulted in the use of large quantities of cracked distillates in both products. This continued throughout the decade.

During the 1950's, there appears to have been no significant pressure on fuel quality brought about by radical changes in locomotive engine design, said the Texaco engineers. Such changes did occur in the automotive field, where high-compression engines required higher octane gasolines, in the commercial highway field where more trucks and buses are using diesel fuel instead of gasoline, and in the aircraft field, where jets and prop jets have meant that airlines are buying kerosene grades instead of aviation gasoline.

Railroad diesel-engine manufacturers generally suggest fuel specifications or refer users to ASTM designation D975-60T, "Tentative Classification of Diesel Fuel Oils." These classifications were arrived at cooperatively by manufacturers, refiners, and users and consist of three grades. No really significant

changes took place in ASTM's tentative classification during the decade.

Fuel-quality specifications can have an effect on diesel-engine operation. There are two quality considerations which are of particular interest to refiners—cetane number and distillation range.

Cetane number, accepted as a measure of the ease of starting, is important in warm-up and smooth operation of the engine. High cetane is of particular significance to high-speed engines operating under varying speed and load conditions. Paraffinic hydrocarbons have the highest cetane numbers, followed by naphthalenes and aromatics. Production of high-cetane fuel requires selection of suitable crude-oil sources along with special refining processes.

The distillation range controls the volume of fuel which can be made available from a given refining operation. Increasing the boiling range, by raising the end point of a distillate or adding residual material, raises a refinery's potential volume. In addition, the distillation range, indirectly at least, controls several other properties of interest to the consumer. From a given crude source, the lighter fractions will usually be "cleaner"—lower in sulfur, ash, and carbon residue. They will also have a lower viscosity. Here, again, the refiner must exercise care in producing suitable diesel fuels.

The real trend during the 1950's seems to have been pressure from consumers for less expensive fuels, which, in most cases, meant fuels of lower quality.

In the case of railroads, the largest single user of diesel fuel, considerable attention was directed toward the use of such lower cost, lower quality fuels. These ranged from 100% cracked distillates to residual materials and blends of distillates and residual stocks.

To partially offset the poorer "natural" quality of economy fuels, as well as to improve quality of better fuels, there was wide-scale use of fuel additives. Primarily, these materials were stability additives or dispersants which retard, minimize, or prevent formation of large gum-like particles which tend to plug strainers and injectors.

Fuel as an item of freight

Mr. Thagard, in his remarks on the growth of fuel as an important freight item, said the increase reflected mounting energy requirement during the Fifties. The total end-use need for energy in the United States expanded from 28,300 trillion Btu in 1950 to some 35,500 trillion Btu in 1960, a 25% increase. Growth occurred in all four end-use energy markets: residual, commercial, industrial, and motive.

In meeting these requirements, oil, gas, and electricity were used increasingly, while coal consumption declined. Total consumption of fossil fuels (oil, coal and gas), including power generation use, increased 30% from 1950 to 1960, while consumption of electricity increased 139%. The growing use of fuels and electricity increases the work of those engaged in making energy geographically available to the consumer. The magnitude of the effort involved in transporting ever-increasing quantities of fuel and electricity is magnified by the great distances over which some of them must be transported.

The principal means of transporting fuels are pipelines, ships and barges, trucks, and railroads.

The quantity of petroleum products transported in the U.S. increased by 60%, from 413 million tons in 1950 to 657 million tons in 1960. During this period shipments by pipelines increased 165%; trucks by 81%, and water by 32%, while railroad shipments decreased 32%.

Pipelines and truck transportation have been able to grow at a faster rate than the total transportation of products because of the economics of pipelines and flexibility of trucking.

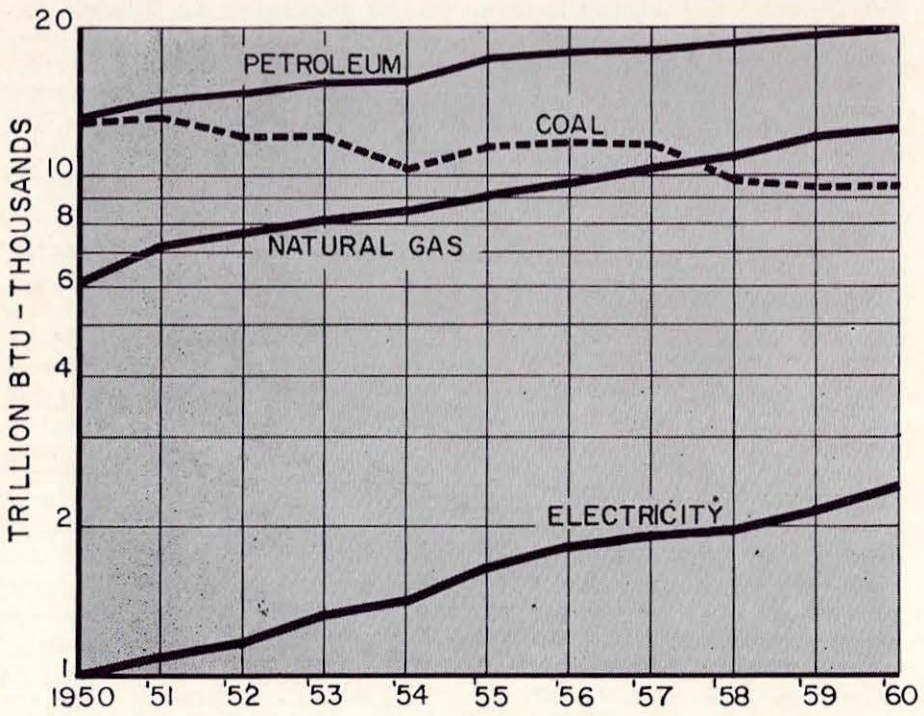
Natural-gas transmission experienced tremendous growth in the Fifties, increasing by over 100%. Natural gas is currently transported only by pipelines. However, much technological progress is being made in the attempt to make liquefied methane gas an economical fuel in the U.S. The liquid would, of course, lend itself to other means of transportation than pipeline.

Unlike the situation in gas and petroleum, substantial coal reserves are situated in the densely populated and heavily industrialized Northeast, which minimizes transportation requirements.

Until recently, coal had to be handled as a solid and its transportation was limited to ship, barge, rail, and truck. The transportation of coal in slurry form by pipeline is now a reality, as demonstrated by the 108-mile line in Ohio, Mr. Thagard told the Symposium. Another proposed line would carry West Virginia coal to electric utility companies on the East Coast.

During the 1950's, coal lost most of the railroad energy market as well as the residential and commercial markets. Industrial use declined slightly, while coal consumption for electrical generation grew rapidly. The bulk of coal now consumed is delivered to substantially fewer customers, with much greater average use per customer. This has simplified the transportation and distribution problem for coal.

Bituminous coal transported in 1960 amounted to some 402 million tons, compared with 501 million tons in 1950. Railroads handle the largest share of the coal traffic. In 1960, about 74% of bituminous coal loaded at the mines moved by rail—down from 82% in 1950. As in 1950, about 12% moved by truck and nearly 11% by river barge —up from 6% in 1950. In 1960, 3% was used at the mine or transported short distances to points of use by conveyor belt, pipeline, or other means.



FOSSIL FUEL and electricity consumption in the U.S.—1950-1960.

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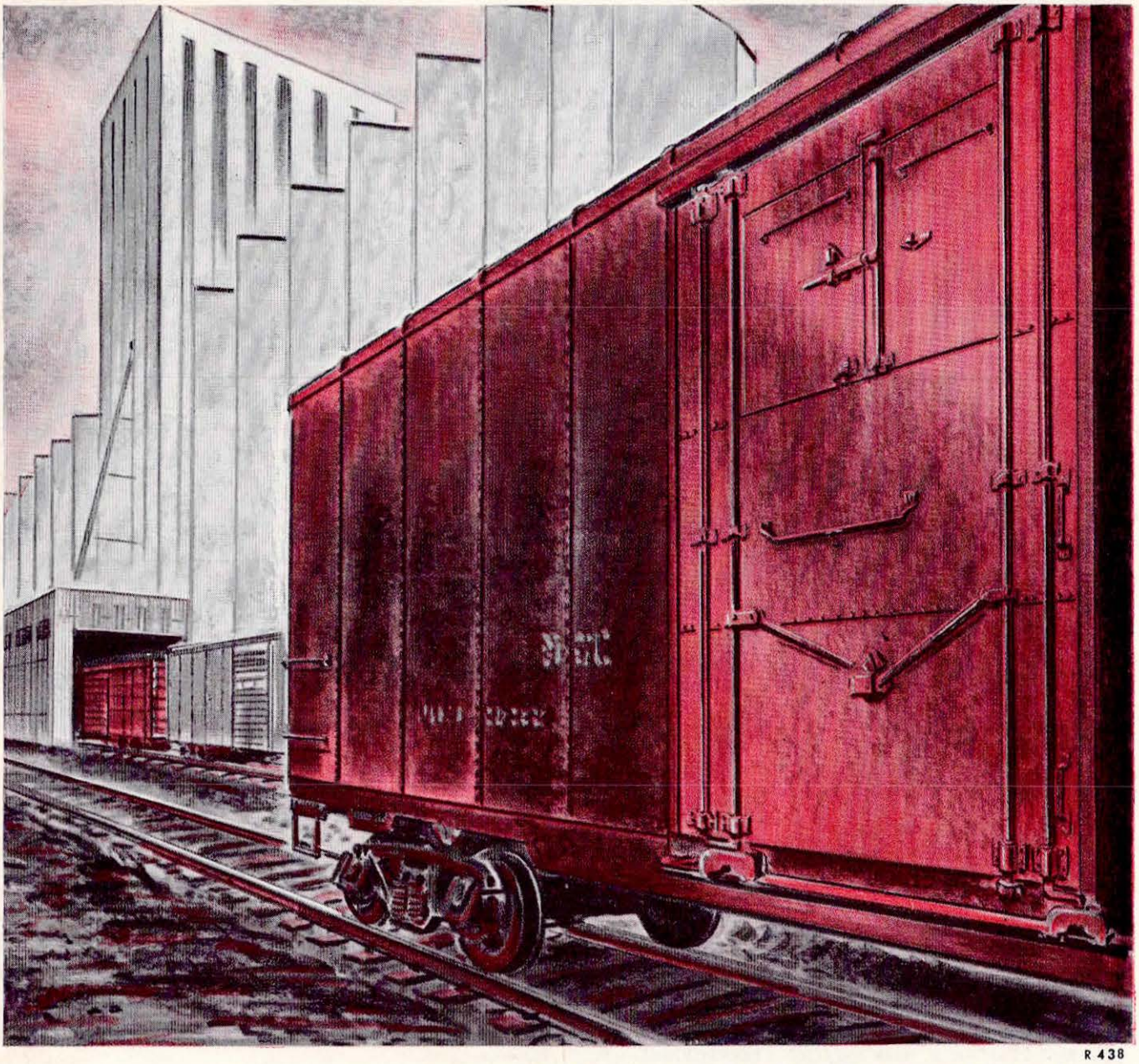

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PEOPLE IN THE NEWS

ASSOCIATION OF AMERICAN RAILROADS.—Charles C. Richardson, assistant manager, Traffic Statistics Section, promoted to manager of that section, succeeding **Michael F. Dolan,** who retired June 30.

ATLANTIC COAST LINE.—N. N. Nelms appointed staff assistant traffic department, Jacksonville, Fla.

BOSTON & MAINE.—Daniel A. Benson, vice president—operations Boston, Mass., elected president and chief executive officer (RA, June 18, p. 47), succeeding **Patrick B. McGinnis,** Mr. McGinnis resigned from that position because of ill health but will continue as chairman of the board.

CANADIAN PACIFIC.—D. J. Cherry, assistant general freight agent, Winnipeg, Man., appointed assistant freight traffic manager—system, rates and divisions, Montreal, Que. **J. A. MacDonell** appointed general freight agent—Atlantic and Eastern regions, rates and divisions, Montreal.

Albert Cowburn, superintendent, Kettle Valley division, Penticton, B.C., became superintendent of the new Canyon division, Vancouver, B.C., on July 1 when the operating structure in British Columbia was rearranged. Despatching offices at Penticton and North Bend were closed. The changing traffic pattern on the south main line through British Columbia and increased activity in the Vancouver area brought about rearrangement of operations and establishment of the Vancouver Terminal division.

Oscar V. Werner, city freight agent, Toronto, Ont., appointed district freight agent there. **David W. Reid,** assistant general agent, Montreal, Que., named general agent, Newport, Vt., succeeding **K. M. Taylor,** retired.

CHESAPEAKE & OHIO.—W. J. Eck, general manager, purchasing and stores, Cleveland, appointed assistant vice president, purchases and stores, and his former position abolished.

DENVER & RIO GRANDE WESTERN.—W. G. Luebke, purchasing agent, Denver, Colo., appointed assistant to vice president—traffic.

DES MOINES & CENTRAL IOWA.—Effective July 1, the general accounting, treasury and claim departments transferred from Des Moines, Iowa, to 1010 Story Street, Boone, Iowa.

ERIE-LACKAWANNA.—Greydon T. Lawrence appointed division passenger sales representative, Akron, Ohio, succeeding **John Paul Clark,** division passenger sales manager, who retired June 30. **George P. Kirtley** appointed sales representative, Toledo, Ohio.

Robert W. Griffin, general yardmaster, promoted to day terminal trainmaster, Buffalo, N.Y. **Rego A. Panella,** yardmaster, named night terminal trainmaster, Buffalo.

FLORIDA EAST COAST.—H. K. North appointed assistant general passenger agent, Miami, Fla., succeeding the late **R. T. Jeffries.**

KANSAS, OKLAHOMA & GULF — MIDLAND VALLEY — OKLAHOMA CITY-ADA-ATOKA. — The following retired July 1: **L. H. Hammond,** assistant vice president—industrial development, after 33 years of service; **H. E. Graham,** assistant traffic manager—divisions, after 37 years of service; **Ivan Kendall,** superintendent of transportation, after 43 years of service; **John F. Johnsbeen,** assistant superintendent of transportation, after 45 years of service. **J. E. Dwyer** succeeds Mr. Kendall as superintendent of transportation, Muskogee, Okla.

LOUISVILLE & NASHVILLE.—Willard H. Thompson, Jr., assistant superintendent, Birmingham, Ala., named superintendent there, to succeed **R. B. Jones,** retired. **C. S. Black,** terminal trainmaster, Birmingham, replaces Mr. Thompson, and in turn is succeeded by **S. B. Gooch. W. T. Dudley,** superintendent, W. & A. subdivision, Atlanta, Ga., transferred to Mobile, Ala., replacing **I. W. Newman,** retired. **T. J. Hale,** superintendent, Chattanooga division, will absorb the W. & A. subdivision and transfer his office from Chattanooga, Tenn. to Atlanta.

MILWAUKEE MOTOR TRANSPORTATION CO.—Jean A. Poer appointed comptroller, Chicago.

MISSOURI PACIFIC.—Jack N. Sanders, regional sales manager, Houston, Tex., promoted to general freight traffic manager-sales, St. Louis, to succeed **Harvey M. Johnson, Jr.,** assistant vice president—sales, who resigned to go with REA Express (RA, June 25, p. 65). Mr. Sanders' successor is **Paul B. Dudek,** assistant to the vice president-traffic, St. Louis, who in turn is replaced by **John C. Selover. Gus O. Oliver,** regional sales manager, Pittsburgh, transferred to New York, replacing **George Brunner,** who retired June 30. Mr. Oliver's successor is **Carl A. Becker,** regional sales manager, St. Louis, who in turn is succeeded by **Thomas B. Arnold,** district sales manager, Los Angeles. **F. Keith Massey,** district sales manager, Houston, replaces Mr. Arnold, and in turn is replaced by **Robert A. Griesman,** transferred from Milwaukee, Wis. **Edward E. McDaniels** succeeds Mr. Griesman. **Robert L. Carmical** appointed assistant district sales manager, Houston, succeeding **Ira M. Giles,** transferred.

NEW HAVEN.—R. S. McKernan, resident information officer at New Haven, Conn., appointed director of public relations there, succeeding **Allan D. Fields,** who has been named vice president—public relations and advertising, Universal American Corp., New York. The New Haven's New York public relations office has been closed.

NEW YORK CENTRAL.—W. J. D. Balsden, assistant director of stores, New York, appointed purchasing agent there, with responsibility for the purchase of maintenance of way materials. **R. T. Fortin,** general storekeeper, Collinwood, Ohio, appointed aspointed assistant director of stores, New York.

O. A. Larson appointed supervisor of training—mechanical, Collinwood.

NICKEL PLATE.—C. M. Shelton. general agent, Harlingen, Tex., retired June 21.

PENNSYLVANIA. — G. E. Williamson named trainmaster, Chicago.

PITTSBURG & SHAWMUT.—Walter E. Buhite, executive vice president, Kittanning, Pa., elected president, succeeding the late **Elmer J. Halberg.**

SOO LINE.—Patrick J. McPartland, formerly special assistant attorney general for the State of Minnesota, appointed attorney, Soo Line.

Daniel A. Benson
B&M

Jack N. Sanders
MP

SOUTHERN PACIFIC.—John W. Ronan, assistant superintendent of the mechanical department, Los Angeles, transferred to Sacramento, Calif., to succeed **H. T. Ankerson,** appointed superintendent of the mechanical department, southern district, Los Angeles. **Ky Pruchnicki,** supervisor of locomotive maintenance, Houston, Tex., transferred to San Francisco, succeeding **Eliot Pope,** retired. **Michael Gogol,** mechanical and test engineer, Houston, named to the newly created position of assistant to the manager of mechanical engineering and research, San Francisco.

Joseph Spear, assistant general traffic manager, Houston, Tex., retired June 30.

Supply Trade

Arthur H. Moorhead, vice president of sales, **LFM Manufacturing Co.,** for the past 35 years, retired June 30.

C. H. Obrist has been appointed commercial representative for stationary and marine engines, **Alco Products, Inc.,** at 910 Seventeenth Street, N.W., Washington, D.C.

Frank E. Stubbs, superintendent of shops, **Southern,** Atlanta, Ga., appointed plant superintendent, **Chandeysson Electric Co.,** St. Louis, Mo., plant.

Glas-Kraft, Inc., Slatersville, R. I., has announced acquisition of all rights, manufacturing equipment and inventory of "Standard" car door barricades formerly made by Standard Railway Equipment Division of **Stanray Corp.,** Hammond, Ind. Glas-Kraft will manufacture this equipment under its own label.

OBITUARY

Wilfred Abell, 61, who retired in Nov. 1960 as signal engineer, Prairie region, **Canadian Pacific,** Winnipeg, Man., died recently.

William J. Cunningham, 87, who retired in 1946 as James J. Hill professor of transportation at **Harvard Graduate School of Business Administration,** died June 24 in New England Baptist Hospital, Boston, Mass.

Walter F. Fauerbach, vice president—sales, **Motor Coils Manufacturing Co.,** Pittsburgh, Pa., died June 5.

Frederick T. Grant, 87, retired general passenger agent, **Boston & Maine,** and **Maine Central,** and initiator of the snow trains in New England, died June 3 in a Boston hospital.

William S. Storms, 70, who retired in November 1956 as general superintendent communications and signals of the **Erie** (now Erie-Lackawanna), died June 10 in St. Petersburg, Fla.

AUTOMATIC YARDS

(*Continued from page 14*)

indicated by the ratio of cars damaged over cars humped. In an eight-month period we have had a high of .0009 (December 1961) to a low of .0001 in August 1961," Mr. Shackley states.

Programs for the maintenance of the apparatus of automatic yard facilities on the Milwaukee Road have been worked out by the supervisors along the line of the practice followed on other signal installations, that is, periodic inspections, adjustments and replacements, frequently depending on type of equipment, are carried out as a preventive measure. "However, experience has taught us that regardless of the amount of preventive action that is taken, major repairs and replacements are required due to derailment and other emergencies, as well as the general wearing out of the equipment," says Signal Engineer P. H. Linderoth.

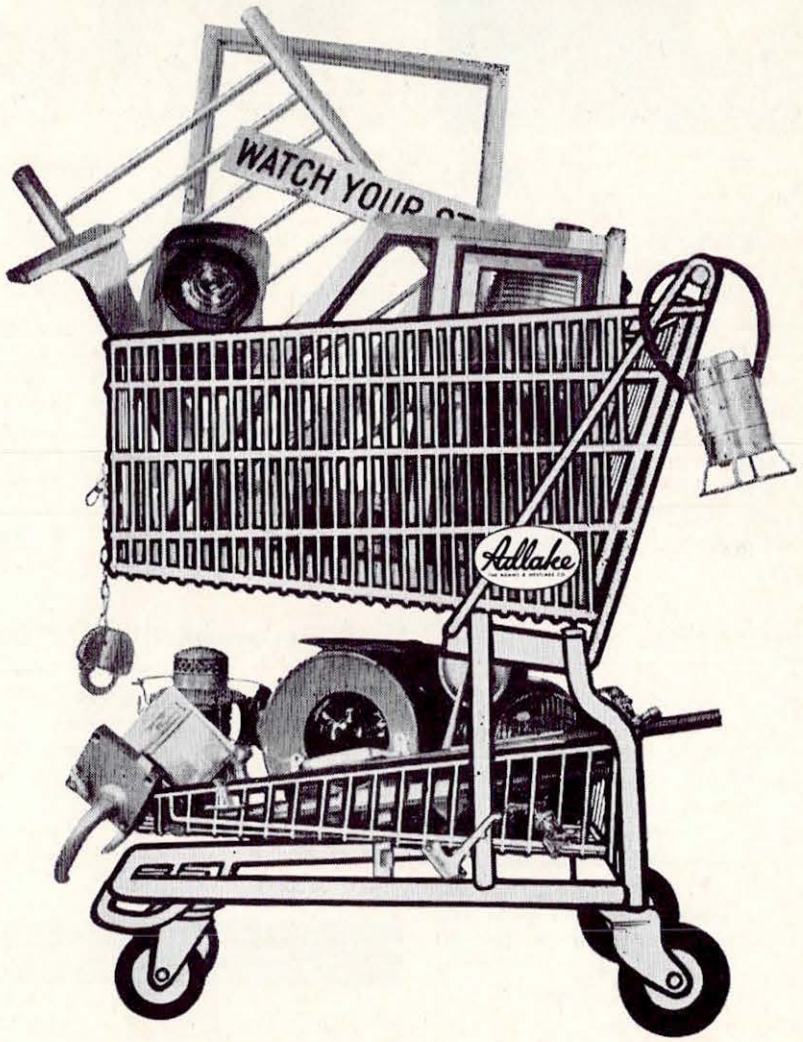
"Our practice has been to assign a traveling relay repairman to go over the various types of equipment used in the automatic switching and speed control for the retarder. We found this to be very important in maintaining satisfactory continuity of operation without interruptions," Mr. Linderoth states.

"We have a preventive maintenance program which includes a rather extensive testing schedule designed to reduce equipment failure to a minimum," says F. L. Chatten, system engineer—communications and signals, Pennsylvania.

Observations of test check panel and power supply indication lamps are made daily. All regulated power supply voltages, RF unit indications, master intermediate speed control panels, and speed-check panels are checked for proper operation twice weekly. The actual coupling speed, determined from measurements taken on the ground, is checked against the requested coupling speed for at least one group each week. Each retarder valve is tested at least once every two weeks. Adjustment for retarder brake shoe wear is checked at least once a month, Mr. Chatten reports.

As for the Frisco, Mr. Gardner says: "We follow a regular program of preventive maintenance and this program is outlined on a check-off chart provided for the maintainers. Included are such items as regular check of radar crystal current, storage battery condition (including charge rate), inspection and cleaning of contactors, etc. Also, we are now engaged in a program of cleaning and testing 'A' type relays used with automatic switching. We do not replace electronic tubes in our equipment on a regular change-out basis, but close observation and regular tests generally allow us to know when the most commonly failing tubes are about to fail."

A+dlake



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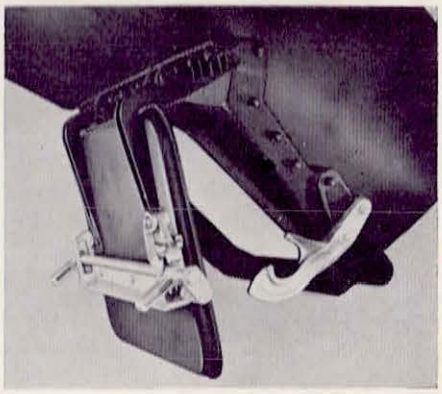
NEW PRODUCTS REPORT

Crane (RA-1)

Power steering and torque converter drive feature the Drott 60RM2 low-profile Go-Devil crane. The crane has a carry-deck area of 50 sq ft. It is said to handle, transport, and position loads up to 6,000 lb with a three-part, 360-deg continuous swing boom which retracts to 6 ft and extends to 16 ft. Speeds range from 5 to 19 mph. Cranes with either a 45-hp diesel or gasoline engine are available. *Drott Manufacturing Corporation.*

Sandblasting Sets (RA-2)

Three units comprise the Handi-Blast portable industrial sandblasting sets—Model 28-A portable sandblaster; Models 118 or 124 portable sandblasting cabinets, and the Model 15-S vacuum pack by Doyle. The units can be set up in any location where 110-volt current, a-c or d-c, and compressed shop air normally used for production spray guns, are available. Model 28-A has an abrasive capacity of 28 lb sand. *Hamill Manufacturing Co.*



Hopper Door Lock (RA-3)

The cam-action principle of this full-width single hopper door lock makes operation easy and provides reserve power for pulling door up tight, or for quickly opening stuck or "frozen" doors. On initial opening, the door opens only part way, permitting discharge of fine materials, or use where conveyor system is inadequate for full discharge. The lock is operative from side of car. In final location, a pawl keeps door locked. *Wine Railway Appliance Co.*

Freight-Car Finish (RA-4)

Polymil, a direct-to-metal finish, doubles as a primer and top coat. It is said to produce a high gloss that will withstand severe weather and repeated cleaning. It can be sprayed on with conventional or airless equipment and is heated to 140, 150, or 180 deg F at the gun nozzle for hot spray. For cold spray application, best flow, gloss and durability are obtained at 50 to 100 deg. One coat of 8 mils wet yields a film thickness of 3 to 4 mils. *DeSoto Chemical Coatings, Inc.*

Urethane Insulation (RA-5)

During manufacture, urethane foam is sandwiched between a variety of paper skins or facings to produce Dyacor, a rigid urethane board. The skins are said to eliminate powdering; reduce air, moisture, and water vapor penetration, and permit the use of low-cost adhesives in fabrication. The board is suitable for insulating trailers and reefers. Basic size is 4 x 8 ft, and thicknesses range from ½ to 2 in. in ¼-in. increments. *Ultra Plastics.*

Triple-Purpose Cleaner (RA-6)

Zeal, a triple-purpose cleaner, is said to sanitize, deodorize, and clean in one operation. Precleaning before sanitizing is unnecessary. The compound is said to kill germs and bacteria upon contact and to destroy the source of odor while it cleans. It is harmless to the skin and safe for use on painted surfaces or other surfaces that water will not harm. It is for use in buses, coaches, terminals, locker rooms, public buildings, etc. *Turco Products, Inc.*

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7/2/62

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Market Outlook

Carloadings Rise 0.4% Above Previous Week's

Loadings of revenue freight in the week ended June 23 totaled 592,708 cars, the Association of American Railroads announced on June 28. This was an increase of 2,376 cars, or 0.4%, compared with the previous week; a decrease of 7,262 cars, or 1.2%, compared with the corresponding week last year; and a decrease of 48,629 cars, or 7.6%, compared with the equivalent 1960 week.

REVENUE FREIGHT CARLOADINGS
For the week ended Saturday, June 23

District	1962	1961	1960
Eastern	80,449	84,181	89,870
Allegheny	97,948	97,984	108,676
Pocahontas	55,878	53,383	56,826
Southern	110,341	103,250	109,984
Northwestern	85,009	88,742	102,238
Central Western	121,411	128,665	127,628
Southwestern	41,672	43,765	46,115
Total Western Districts	248,092	261,172	275,981
Total All Roads	592,708	599,970	641,337
Commodities:			
Grain and grain products	55,710	63,788	61,019
Livestock	2,139	2,290	3,819
Coal	115,215	111,753	115,128
Coke	6,050	6,987	6,935
Forest Products	37,838	36,686	39,863
Ore	54,309	50,987	72,435
Merchandise l.c.l.	23,772	28,590	35,606
Miscellaneous	297,675	298,889	306,532
June 23	592,708	599,970	641,337
June 16	590,332	602,175	649,503
June 9	581,336	593,316	648,658
June 2	530,829	531,705	574,980
May 26	580,361	578,767	639,864
Cumulative total, 25 weeks	13,783,391	13,059,325	15,141,897

PIGGYBACK CARLOADINGS.— U.S. piggyback loadings for the week ended June 16 totaled 14,455 cars, compared with 12,502 for the corresponding 1961 week. Loadings for 1962 up to June 16 totaled 315,014 cars, compared with 262,466 for the corresponding period of 1961.

IN CANADA — Carloadings for the seven-day period ended June 14 totaled 79,987 cars, compared with 78,993 for the previous seven-day period, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada		
June 14, 1962	79,987	24,677
June 14, 1961	74,054	23,097
Cumulative Totals		
June 14, 1962	1,510,783	554,744
June 14, 1961	1,470,222	574,278

New Equipment

FREIGHT-TRAIN CARS

► *Louisville & Nashville.*—Will lease nine Dia-Flo covered hopper cars from General American. Cars are scheduled for October delivery.

► *Wabash.*—Ordered 20 Dia-Flo covered hopper cars from General American for delivery by Oct. 15.

New Facilities

► *Canadian National.*—Invited bids for the construction of a 2.46-mile-long subgrade for a spur line to the site of a new fish-products plant at Lunenburg, N. S.

► *Des Moines & Central Iowa.*—Started construction of a classification yard and diesel shop northeast of Des Moines at an estimated cost of $150,000.

► *Louisville & Nashville.*—Directors authorized expenditure of $1,140,865 for construction projects and purchase of roadway machines. Included are construction of eight additional tracks at Tilford Yard, Atlanta, Ga., to increase switching capacity by one-third, $437,200; purchase of additional machines for maintenance of way and structures, $355,298; construction of 3.5-mile industrial lead track to serve plant at New Johnsonville, Tenn., $144,152; construction of 7,173-ft passing track and crossover at Columbia, Tenn., $81,130; increasing clearance of Solway Tunnel near Knoxville, Tenn., $62,040; and construction of street underpass at Birmingham, Ala., $61,045 (railroad's share of cost).

► *New York Central.*—Will purchase a $1.5-million automatic message switching and processing system from Collins Radio Co. Known as Data Central, the new system will poll each teletypewriter station in a network, recognizing message priority and traffic requirements automatically. If a circuit is available, the message will go through Data Central to its destination. If the addressed station is busy, Data Central will store the message and forward it when the line is available.

Purchases

► *Three Months' Purchases Up 8.3%.*—Purchases by domestic railroads of fuel, material and supplies in this year's first three months were $27,029,000, or 8.3%, higher than in the comparable 1961 period. Purchase estimates in following tables were prepared by Railway Age.

*PURCHASES**	*March 1962*	*Three Months 1962*	*Three Months 1961*
	(000)	*(000)*	*(000)*
Rail	$ 6,358	$ 15,350	$ 8,264
Crossties	2,988	9,683	9,161
Other Material	89,676	239,522	212,769
Fuel	29,222	87,412	94,744
Total	$128,244	$351,967	$324,938

*Subject to revision.

Mechanical Division Ups Load

► **The Story at a Glance: Announcement that a 5% increase in freight car rail load limits will become effective Aug. 1 highlighted the annual meeting of the AAR Mechanical Division in Chicago last week. Members were also told that April 1962 appears to have been the first month when hotbox performance exceeded 1,000,000 miles per set-out. Other highlights:**

- **Discussion of problems involving specialized freight cars.**
- **Addresses by AAR Vice President C. D. Buford, who termed Mechanical Division activities among the "most serious and important work" done by any AAR group; and AAR Vice President—Research W. M. Keller.**
- **Questions posed by W. T. Rice, Atlantic Coast Line president, about the effects of cars so highly specialized that railroads may be sacrificing the flexibility which has characterized the freight-car fleet in the past.**

Practically all freight cars can be loaded heavier after August 1. An increase in permissible rail load limits follows the affirmative letter ballot vote, based on car ownership, which was reported to the AAR Mechanical Division last week. The Division's 34th annual session, held in Chicago, was told that while the 5% increase in total loaded weight on rail had been approved by 1,241,362 to 462,235, the large number of negative votes means that controversial Interchange Rule revisions to implement this increase must again be submitted to Mechanical Division committees for further study.

Although all facets of the problem cannot be resolved by August 1, the new limits for load on rail for four-axle cars, to be effective then, will be:

Nominal Capacity Tons	Axle Journal Size	New Limit lb	Present Limit lb
40	5 x 9	142,000	136,000
50	5½ x 10	177,000	169,000
70	6 x 11	220,000	210,000
100	6½ x 12	263,000	251,000

No change is being made in the rail-load limit for 30-ton cars, only a few refrigerator cars of this type remaining in service. The increased load limit would not apply to any car which has structural limitations that are indicated by a star ahead of the load limiting stencil on the sides. Actually, the 5% increase in gross rail load represents a somewhat greater percentage gain in carrying capacity. Because the light weight of the car does not change, the increase of 5% calculated on the gross rail load means that the increase in load limit is more than 5%. For example, the so-called 100-ton hopper car weighing 55,000 lb is, at present, allowed to have a gross rail load of 251,000 lb. This means that the load limit for the car is 196,000 lb. With the gross rail load stepped up to 263,000 lb, load limit becomes 208,000 lb—an increase of 12,000 lb. Based on original load limit of 196,000 lb, this represents a gain of 6.1%.

Spring performance, axle life, and bearing wear can be involved in heavier loading of cars. F. Peronto, executive vice chairman of the Mechanical Division, said in announcing the ballot results that along with the increase in permissible rail loads, the Interchange Rules are being revised on August 1 to provide for installation of higher-capacity spring groups in car trucks. Most of the negative votes were based on claimed unenforceability of the other Interchange Rule revisions, being held in abeyance for the present, which include:

- Probibition of indiscriminate overloading of cars beyond new rail load limits with special provisions for flat cars handling extraordinary loads;
- Requirement that handling line issue defect card when a foreign or private-line car has been knowingly overloaded;
- Permit removal of axles for inspection and renewal, if necessary, on authority of defect card issued for "axles loaded beyond limit";
- Requirement that owning road remove for inspection the axles of cars repeatedly overloaded on its own line before such cars are presented in interchange.

Mr. Peronto went on to report that the installation of lubricators in the journal boxes of interchange freight cars is virtually completed. He said that preliminary cumulative figures for April 1962, just now being compiled, indicate that the national average was over 1,000,000 miles per hotbox set out—highest ever recorded by the AAR.

This accomplishment was hailed by W. T. Rice, ACL president, who told the group that the improved journal performance has been a key factor in expediting freight trains. Mr. Rice then went on to raise questions about specialized freight cars, acknowledging that they can win traffic, but asking if railroads are sacrificing the flexibility and equipment pooling ability which has characterized the American freight car fleet in the past. He urged adequate appraisal and testing of specialized freight car designs to insure that railroads do not someday regret their investment in such equipment. These problems are the responsibilities of the mechanical officers of individual railroads and of the AAR Mechanical Division, he said. "Keep your railroad's top executives informed on these equipment problems," he urged the assembled mechanical officers.

Tomorrow's freight cars must be bigger, better, interchangeable, and more adaptable, Mr. Rice concluded. They must be easily kept in repair, should be standardized as much as possible, and should not involve inadequacies in design which can dissipate railroad funds.

Coming: 200-ton cars

Foremost in rolling stock developments during the next decade should be freight cars of higher capacities. That was the prediction of W. M. Keller, AAR vice president—research, who discussed how progress in locomotives and cars has been achieved and how it can be continued and accelerated.

The next decade, Mr. Keller forecasts, should be marked by the introduction of 150-ton and 200-ton cars, 25,000-ton trains, a reduction of 30 to 40% in the freight car fleet, 75-mph freight train speeds, automatic car identification, and automatic operation of trains. "These goals will not occur just by saying we need them," he cautioned. "We will need research and technical development more than ever. We will need the cooperation and collaboration of the AAR Mechanical Division."

After citing progress made in improving car trucks, brakes, wheels, and journal bearings, Mr. Keller said that such changes came about through the efforts of the AAR Research Center, the Mechanical Division committees, the suppliers, and the individual railroads. "We must examine all of our activities toward developing new concepts of equipment, maintenance methods, materials, and standards. We must not only continue, but expand our research efforts. We need a better freight car truck, better car underframes and superstructures, and still better bearings . . . At the Research Center we are not satisfied with our latest design of axle. We think that it needs some further revisions, particularly in view of increasing the load that it carries by 5%."

Limits 5%

Progress can be furthered by avoiding duplication of research. Mr. Keller suggested as solutions to this problem the publication of work done by all laboratories concerned with railroad problems, the publication of technical society papers by railroad technicians and supply company engineers, and the channeling of all work through a central organization—preferably the AAR which already has the organization and facilities for such coordination. "It is evident that if we continue to conduct research on critical problems and avoid any overlapping, we greatly increase the effectiveness of a research program," he pointed out.

"We estimate," he continued, "that the entire research program of the AAR and railroads combined is approximately $10 million per year, of which the AAR spends less than 10%. In a research program as small as this, there cannot be tolerated any overlapping or duplication if the fullest benefits are to be obtained . . . Our work is at times rather prosaic in nature. It is true that the work we have been doing on automatic car identification and mathematical models for track maintenance is intriguing. We still must handle the non-glamorous projects which can be just as important in the operation of equipment as those which are spectacular or more glamorous. While we must gaze into the blue sky in thinking of future projects, we must keep our feet on the ground while we are doing it.

"One of the most progressive steps taken recently is the across-the-board increase in loading limit of 5%. The Research Center, working with the Mechanical Division, employed almost purely technical considerations to increase the capacity of the freight car fleet by 5%. Since we have 2 million freight cars in this country, if they were all capable of being raised to the new capacity, we would have in one stroke, increased the car fleet by the equivalent of 100,000 cars. Assuming that only half of the fleet can be utilized to this extent, we have gained the carrying capacity of 50,000 cars without increasing car ownership. We do not think we should stop here when we consider our new car designs. We are inclined to think that very much higher capacities should be built into future designs of cars. We think the time will come when cars, some perhaps articulated, will be carrying lading weighing as much as 400,000 lb. Here I do not refer to special high-capacity flat cars, but rather to box cars, tank cars, hopper cars, and others. If we are able to meet this objective, we could reduce our car fleet by 30 to 40% and still be more efficient than we are today.

J. A. Welsch, Illinois Central
Chairman, Mechanical Division

L. E. Gingerich, Pennsylvania
Vice Chairman, Mechanical Division

"Another requirement for the future is greater reliability of equipment. Cars must be designed and built to stay off shop tracks. Shop tracks should in the future be used only for corrective repairs to cars that have been damaged by some emergency conditions . . . Required frequent attention is an indication of inadequate design or maintenance methods . . . We must improve locomotive efficiency as well as car efficiency," Mr. Keller said.

Emphasis on car design by the AAR Mechanical Division was called one of its most significant activities by C. D. Buford, AAR vice president. He said that a task force to review the fundamentals of car design is to be established by August 1. It is expected that this group will update design criteria to meet the demands of today's railway services. He called the Mechanical Division committees "among the most vocal, hardest working" groups in the AAR organization. Theirs is a "most serious and important work," he said.

"The ability of new style cars to carry many materials at lower costs than ever before is permitting railroads to regain business or to attract new business," Mr. Buford said. "The railroads have always been required to transport anything any place, and this requirement with today's sophisticated products is more demanding than ever —but the railroads are still doing the job in exemplary fashion.

"The challenge of the future is great. More than ever before you will be called upon to develop new techniques, new tools, and new methods. The needs of the future will involve new and improved motive power, larger cars carrying greater tonnage, better control of the environment of goods in transit, improved methods for controlling the shocks and impacts inherent in transportation, and simplified means of assembly and repair of cars. Containerization which has transformed railroading in the last half dozen years will certainly progress faster in the direction of a variety of small containers, bringing with it many problems."

Optimism about the future of railroads was expressed by O. H. Zimmerman, vice president—operations of the Illinois Central. "We have today a number of developments working in favor of the railroads that we could not have hoped for even a few years ago," he said. "One is the coming change in work rules. We don't know yet how the negotiations will come out or how long they will take, but we do know that inevitably we are going to have working rules more in harmony with this age of railroading. We can't expect the operating unions to be enthusiastic about some of these changes. The simple truth is that all railroaders in the long run will be better off after the new rules are drawn. There is no future in an industry that is going downhill. To make jobs more secure, we have to be moving uphill.

"The President has called on Congress for changes in transportation laws. We have no way of knowing how long it will take to bring about changes needed to put our industry on the same competitive basis as the other forms of transportation. But the mood of the country is to take away from our competitors the unfair advantages they have and to allow the railroads to really show what they can do in an equal fight."

The experimental 4,500-hp coal-burning gas turbine locomotive, based on designs of the Locomotive Development Committeee of Bituminous Coal Research, has been completed by the

Union Pacific, the Committee on Locomotive Fuels and Lubricants reported. Since December, 1961, it has been undergoing stationary testing at Omaha, Neb., first on fuel oil and more recently on coal. It is planned to put this locomotive in road freight service between Omaha and Cheyenne, Wyo., 507 miles.

While the Union Pacific has stored some of its older 4,500-hp oil-fired gas turbine locomotives, the Committee reported that the 30 8,500-hp oil fired turbines put in service over the past three years produced 18.1% of all Union Pacific gross-ton-miles in 1961.

A report on three of the Krauss-Maffei diesel hydraulic road freight locomotives was made by the Committee. "They have operated since November 1, 1961, in various kinds of road freight service, and as of March 31, 1962, had accumulated approximately 30,000 miles each. Their performance has been considered very satisfactory. They have exhibited good acceleration characteristics, can operate for long periods at speeds as low as 1 to 2 mph without overheating of transmission oil, produce good adhesion characteristics and develop a smooth application of power without jerking. Starting drawbar pulls up to 284,000 lb have been recorded for the three units without separating the train.

"The performance of the hydrodynamic brake has been outstanding—operating personnel consider it to be far superior to the electro-dynamic brake and less air [braking] is required to control the speed of trains on heavy descending grades. While this design was an innovation, it has met all expectations." The Committee reported that changes have been made in the engine air intake systems, in the fuel burned, and in the multiple-unit control system. "While the operating performance and characteristics of these diesel-hydraulic units have been well established by service test, the maintenance facts will take at least one year to determine," it was concluded.

The rapid growth in static-state electrical control devices promises major changes in design and maintenance techniques for both locomotives and car equipment, the Committee on Electrical Equipment—Rolling Stock reported. The Committee also forecasts the elimination of commutators and brushes on diesel-electric locomotive main generators and traction motors.

As an alternate for current car repair billing practice, the Arbitration Committee has completed changes which will permit full use of machine accounting for interline billing.

The Committee on Lubrication of Cars and Locomotives is now studying the establishment of regional lubricating stations where all plain-bearing journal boxes on freight cars would be oiled. These would be located so that each car would receive attention at approximately 1,000-mile intervals. This action is being undertaken because some roads, taking advantage of the low oil consumption of the plain-bearing journal boxes with lubricators, have eliminated the so-called "free oiling" of cars moving in interchange. In some cases cars have subsequently run dry, with hot-boxes resulting.

Tread and flange contours are to be standardized on all types of freight car wheels. To be adopted as the standard will be the contour of the present one-wear wheel. At the same time the diverse styles and chemical compositions of wrought-steel and cast-steel wheels are being consolidated into as few basic types as possible. It is proposed that there be seven basic styles of wrought-steel wheels, and ten styles of the cast-steel types. These 17 designs would include all the one-wear, two-wear and multiple-wear designs.

J. A. Welsch, general superintendent motive power, Illinois Central, was chosen chairman of the Mechanical Division, succeeding J. W. Hawthorne, chief mechanical officer of the Atlantic Coast Line. L. E Gingerich, chief mechanical officer, Pennsylvania, was chosen to be vice chairman.

Stainless Steel Hopper in Service

Western Pacific, first railroad to order Tenelon stainless steel covered hopper cars, has received the first unit of its 10-car order from Thrall. Recognizing the versatility of a "kitchen clean" stainless steel hopper car, Western Pacific says it expects its new cars to provide shippers substantial efficiencies and cost savings. The three-compartment, 4,000 cubic foot cars have four discharge gates. The 50-deg slope sheets are designed to decrease unloading time and absence of a center sill produces an unobstructed opening above the center discharge gates. WP says cars will carry such bulk commodities as rice, malt, many types of foodstuffs, chemicals and other products. Cars are equipped with twelve 20-in diameter loading hatches in the roof. Tenelon, a stainless steel produced by U.S. Steel Corp., was first used in car construction last year when USS had an experimental covered hopper built.

SUNA to Reopen Old Wage Case

The Switchmen's three-year-old wage case will be reactivated in bargaining sessions set for the week of July 9. Last week's U. S. Supreme Court decision upholding the validity of SUNA's constitutional provision calling for membership ratification of negotiated agreements brought the issue back to life.

Failure of SUNA rank-and-filers to ratify a settlement recommended by an emergency board in July 1960, led to a strike threat and a U. S. District Court restraining order against the work stoppage. SUNA's appeal to an appellate court resulted in reversal of the District Court order, but a carrier petition for review by the U. S. Supreme Court has kept the anti-strike injunction in force. The high court's refusal to review the case confirms the right of SUNA negotiators to bargain subject to membership ratification.

Rough Journey Seen For Transport Bills

► **The Story at a Glance: Tough going is ahead for bills to implement major recommendations of President Kennedy's transportation message, if the outlook was reflected in questions and comments by members of the House Committee on Interstate and Foreign Commerce and the Senate Commerce Committee, both of which began hearings on the proposed legislation last week. At the same time, however, the committees were warned by Secretary of Commerce Hodges that "if corrective action is not taken soon, we run the grave risk of having our transportation system deteriorate to the point where it can no longer be supported by private enterprise."**

Also last week, the Senate and House completed Congressional action on the Excise Tax Act which includes provisions, effective Nov. 15, for repeal of the 10% tax on fares of railroads, bus lines and domestic water carriers.

The Kennedy Administration's presentation in support of legislation to implement recommendations of the President's transportation message got under way June 26 at hearings before the House Committee on Interstate and Foreign Commerce. The following day, the Senate Commerce Committee opened its hearings.

Secretary of Commerce Hodges opened the presentation, making virtually the same statement at both hearings. He was accompanied by Commerce's undersecretary for transportation, Clarence D. Martin, Jr., who also made like statements at both hearings; and by the deputy undersecretary, Frank Barton, who answered several of the questions asked by the committee members.

The Commerce Department officials dealt principally with two House bills, H.R. 11583 and H.R. 11584, and two identical Senate bills, S. 3242 and S. 3243, which were introduced by Chairman Harris (D.-Ark.) of the House committee and Chairman Magnuson (D.-Wash.) of the Senate committee.

H.R. 11583 and S. 3243 would implement that Presidential recommendation which calls for removal of ICC and Civil Aeronautics Board powers to fix minimum rates for railroad, truck and air transportation of commodities in bulk, the water transportation of which is now exempt from regulation, and/or railroad, water and air transportation of commodities, the truck transportation of which is free of regulation under the Interstate Commerce Act's so-called agricultural exemption. These bills would also remove the ICC's power over minimum fares of railroads and bus lines, but would not disturb CAB's power over minimum air fares.

H.R. 11584 and S. 3242 contain several provisions, one, which Secretary Hodges identified as "probably the most important," being that authorizing agreements between the federal government and states to enforce safety regulations applicable to interstate trucks and to curtail illegal operations of private and exempt truckers. Other provisions of these bills would free truckers from the ICC prohibition against their use of Plans III and IV piggyback services; authorize the ICC, CAB and Federal Maritime Commission to form joint boards for review of joint rates between carriers of different types; amend the Civil Aeronautics Act to require air carriers to pay reparations; and transfer to the Department of Commerce the ICC and CAB authorities over government guaranty of loans to railroads and air lines. The bills also contain Congressional declarations that regulatory agencies should encourage carriers to experiment with rate innovations and extend through-route and joint-rate arrangements between carriers of different types.

Mr. Hodges also endorsed several other pending bills which were introduced before the President made his recommendations, but which propose legislation in line with those recommendations. These proposals would repeal the Interstate Commerce Act's commodities clause, which prohibits railroads from transporting commodities (except lumber and their own supplies) in which they have any interest; extend to truckers and forwarders the act's reparations provisions which now apply to railroads and water carriers; apply motor carrier safety regulations to private trucks; and make domestic trunk air carriers ineligible for subsidy.

Secretary Hodges also endorsed the Excise-Tax Act's repeal of the fare tax, and the pending proposal to provide more federal aid for urban transit through the Housing and Home Finance Agency.

"Equal opportunity for all forms of transportation and their users and undue preference to none," was put forth by Secretary Hodges as a "key element" in the President's program. The Secretary also said:

"It is because an efficient transportation system is vital in our economy and because that system is in trouble that this administration has concluded that federal policies must be reshaped in a fundamental and far-reaching fashion. If direct and decisive action is not taken in the near future, the inefficiencies, inequities and other undesirable conditions that confront us now will either cause permanent loss of essential services or even more difficult and costly solutions in the not-too-distant future."

Committee Chairman Harris presided at the House hearings, which he opened with a brief statement saying the committee will make the best possible record on the "highly important" proposals involved. Senator Pastore (D.-R. I.) presided over the Senate hearings in the absence of Committee Chairman Magnuson.

The proposals are "very controversial," reaching some "most sensitive areas," Mr. Pastore said, adding that the Senate Committee will act only after all interests are heard.

Chairman Magnuson had announced previously that the committee would hear only witnesses from government agencies at the present sessions. This testimony will then be printed, the chairman continued, adding: "Distribution of the government testimony will permit the public to examine carefully both the proposed legislation and the government's position with regard to it. These bills are too important to be given casual or hasty consideration."

The hearings were unusually well-attended by committee members. Several of their questions related to the urban-transit proposal, but most of them asked about the proposal to remove minimum rate powers of the regulatory agencies. At one point in this question-and-answer period on the House side, Secretary Hodges said the administration decided to present its program "without any regard to the political phase because we must put transportation back on its feet."

Mr. Hodges conceded that equality could be achieved by repealing the present bulk commodity and agricultural exemptions, but he said the administration thought equality by deregulation was the better way. Other questions, especially from Senate committee members, reflected concern that the administration proposal would bring on destructive rate wars.

YOU OUGHT TO KNOW

BLE's first international convention since 1956 will begin July 9 in Cleveland. Among the major tasks facing the union's 364 delegates: revising the BLE constitution to conform with new federal requirements, principally those covered in the Landrum-Griffin Act. Also on the agenda: addresses by Labor Secretary Goldberg and Canadian Labor Minister Starr; and election of officers. Roy E. Davidson, grand chief engineer since Aug. 1, 1960, will be a candidate for re-election.

A Pacific-type locomotive is the newest (and heaviest) object in the Smithsonian Institution's 55-million-item collection. Southern President D. W. Brosnan formally presented No. 1401 to the Smithsonian's new Museum of History and Technology in Washington, D. C., June 27. The 92-ft-long, 280-ton steamer was built in 1926 at the Richmond, Va., works of the American Locomotive Co. No. 1401 was one of the locomotives used on President Franklin D. Roosevelt's funeral train in 1945. It was retired from service March 13, 1954.

Associated Traffic Clubs of America will hold their 39th national convention at Houston, Tex., Sept. 16-18. ACL President W. T. Rice will be the principal speaker at the Sept. 17 luncheon.

A "key-point" terminal was opened by REA Express at Milwaukee, Wis., June 27. The new facility is No. 18 in REA's network of consolidated terminals. Located at 1229-35 S. 41st St., the new terminal replaces former Milwaukee express facilities at 527 N. 4th St. and 600 N. Marshall St., as well as an automotive maintenance shop at 1510 N. Water St.

Net earnings of ACF Industries for the fiscal year ended April 30, 1962, totaled $6,010,000, compared with $5,088,000 for the previous year.

A bill to include railroad signalmen within coverage of the hours-of-service law has been introduced by Senator Smathers (D.-Fla.). The bill (S.3401) would extend the 16-hour limitation on continuous duty to employees installing, repairing and maintaining signal systems. The bill has been referred to the Committee on Labor and Public Welfare.

Maine Central's centennial will be observed in October. President E. S. Miller said the railroad is planning a three-day celebration at Waterville, Me., "the physical and corporate site of the merger of the Androscoggin & Kennebec and the Penobscot & Kennebec railroads, on Oct. 28, 1862, producing the system which is now Maine Central."

New chairman of the Western Conference of Railway Counsel is Edwin R. Eckersall, vice president and general counsel of the Milwaukee Road.

General liability-limiting rules proposed by railroads and truckers have now been condemned by the ICC on their merits. The rules would have limited liability to $3 per pound, with maximum of $200,000 per rail shipment, and $150 per package or $100,000 per consignment, for truck shipments. Additional charges would apply for declared values in excess of these amounts. The Commission first disclaimed authority to consider the rules, but the carriers got court orders setting aside that determination and remanding the case. The result is the present decision which holds that the rules had not been shown to be just and reasonable. It's a victory for the NIT League, which spearheaded shipper opposition to the proposed departure from the commodity-by-commodity approach to released rates. Truck and rail cases covered were docketed as Ex Parte No. MC-49 and Ex Parte No. 197.

A Business Logistics Forum will be held July 20-21 at Stanford University, Stanford, Calif. Karl M. Ruppenthal, director, Transportation Management Program, said the forum will (1) "study the changing function of the industrial traffic manager"; (2) "examine the concept of business logistics"; and (3) "explore potential uses of specialized transportation, 'premium' transportation, and other innovations that may be tailored to the needs of specific users." Registration deadline is July 13.

The Hudson & Manhattan, which operates rapid-transit tubes between New York City and New Jersey, may be taken over by the Port of New York Authority's new subsidiary, PATH, "as early as August 1," says the authority's chairman, S. Sloan Colt. PATH (Port Authority Trans-Hudson Corp.) was created to operate the railroad. The authority's board on June 14 authorized the filing of condemnation proceedings to speed the takeover. First item of business, said Mr. Colt, will be a $223,600 station-improvement program. A long-range rehabilitation program calls for the acquisition of 250 new cars.

BLF&E Wealthiest Of Railroad Unions

Richest union among the railroad brotherhoods appears to be the Brotherhood of Locomotive Firemen & Enginemen. It had total assets of $29,340,900 when it prepared its first report under the Labor-Management Reporting and Disclosure Act of 1959. The Department of Labor has now made public these initial reports which covered the period from Sept. 14, 1959, to the end of the unions' fiscal years.

Reports of other large railroad unions showed total assets as follows: Brotherhood of Maintenance of Way Employees, $12,797,200; Brotherhood of Railway Clerks, $12,230,500; Brotherhood of Railway Carmen, $5,591,000; Brotherhood of Railroad Trainmen, $5,040,100; Brotherhood of Locomotive Engineers, $4,574,600; Switchmen's Union of North America, $1,211,000.

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The traffic V-P of a medium-sized railroad was worried. He knew he could get 8 to 10 thousand carloads of added traffic if he could prove to his president that the rate necessary to get the tonnage would be profitable.

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He proved his case with the boss and he got the business.

What do you suppose might happen to railroad traffic and net earnings all over the country if every traffic salesman would read the Poole book and apply its lessons to his business?

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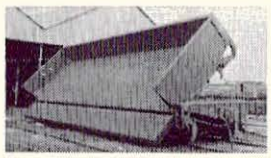

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How to Avert A Recession

There is one sector of railroading concerning which the interests of labor, management, shippers, suppliers—all groups in and around the industry—are in practically complete harmony. This sector is that of earnings available for maintaining plant and equipment; and attraction of an inflow of investment money for replacement of worn-out facilities, and for improvements.

In this sector, performance in recent years has been abysmally unsatisfactory. Improvement in it would be highly beneficial to shippers, to employees, to investors, and to the public as a whole. So much attention is devoted to controversial questions that the all-important goal of keeping railroads physically up-to-date is often overlooked. And yet, just how important would all the controversial issues in and around railroads be, if the industry had plentiful funds for maintenance, and an ample inflow of investment money for improvements and replacements?

Indeed, all the many debates going on in and about the railroads are important, not in themselves, but largely because of the bearing they have on the adequacy of railroad earnings. And if any or all of the controversial issues could be peaceably settled—but without providing railroads with the money needed to maintain, replace and improve their property—then the country would still have a "railroad problem" on its hands.

An expert in the area of the needs of the railroads for plant renewal and improvement—James L. Sheehan of the investment firm of Dick & Merle-Smith—summarized this situation in a talk to the Railroad Public Relations Association on June 15 (noted briefly in RA, June 25, p. 86). Capital expenditures by railroads, for improvements and renewals, have averaged about $1 billion annually since the war (and were less than $650 million in 1961). Taking account of the inflationary rise in prices, these expenditures should have averaged, probably, at least double that amount, to have kept railroad facilities thoroughly up-to-date.

Mr. Sheehan went on to compare railroads with the Bell Telephone System and the electric utilities. In 1960, railroads took in $9.5 billion in gross revenues—compared with $7.9 billion for the Bell System and $11.9 billion for the electric utilities. But railroads carried only 8% of their gross revenue through to net earnings (before income taxes), while the Telephone Company's and the utilities' net-to-gross ratios were each more than 31%. How can railroads compete for the investors' dollars with that record of relative performance?

Mr. Sheehan did not discuss railway maintenance expenditures—but it is a well-known fact that upkeep of both track and structures, and equipment as well, has been lagging on many railroads. And retarded maintenance is just as much of a drag on the quality of railroad service as antiquated plant.

It is true, of course, that some favorably situated railroads are well maintained and can finance their needs for replacements and improvements. On the other hand, railroads as a whole form a nation-wide system of transportation. Fully modern and well maintained railroads interchange traffic with the physically impoverished properties. The service of the more prosperous roads is diluted and pulled downward by that of their impecunious connections.

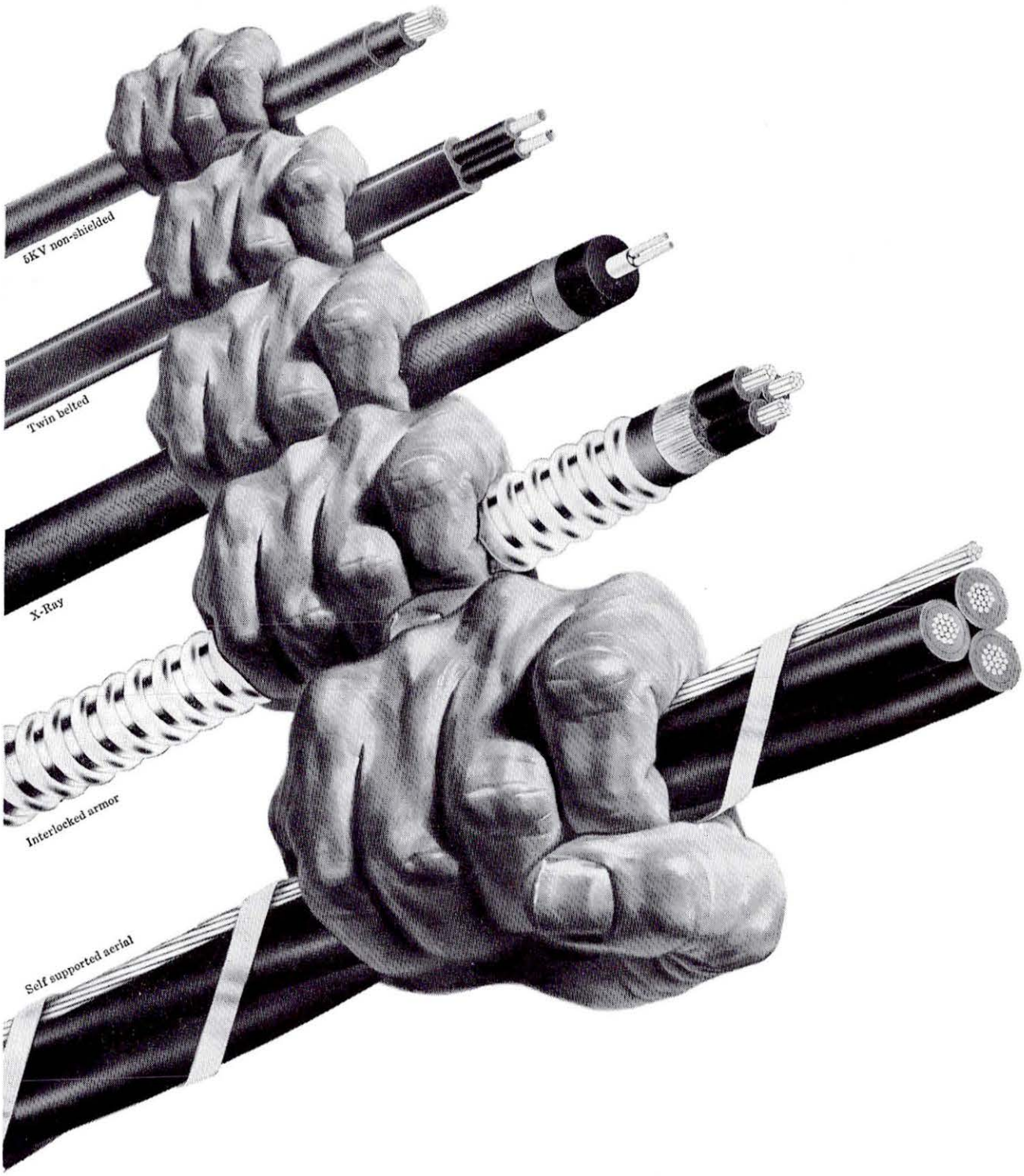
The physical quality of railroad service is vitally important in such a period of intense competition as the present. Truck and barge operators need concern themselves only with the maintenance and replacement of their vehicles. They have no fixed plant to replace, to maintain, to improve and to pay taxes on, as railroads do.

Railroads (as shown in a recent compilation by the Association of American Railroads) expended $998 million on roadway maintenance in 1947 and $955 million in 1960. Comparing the same two years—expenditures by federal, state and local governments to provide and maintain facilities for railroads' competitors soared from $3.5 billion in 1947 to $12.2 billion in 1960 (and are estimated at $13.70 billion in 1962).

A Readily Available Remedy

Meantime, the general business outlook has developed areas of uncertainty which can give no satisfaction to anybody—except, possibly, to the gentlemen in the Kremlin. The country's businesses—capital goods industries in particular—need more orders. Where are the increases in orders to come from, aside from "make work" expenditures by government? Railroads have the best answer there is to that question. They have a vast backlog of maintenance work and capital expenditures, urgently needed to bring their properties up to the standards required for service of attractive quality. To make such expenditures, they do not need appropriations from the federal treasury, but only the right to compete on equal terms with other forms of transportation—equal freedom from excessive regulation, equalized working rules for labor, equal taxation, equal access to investment capital.

There is no other industry in the country that could provide, as railroads could, a large and badly needed increase in the country's markets for the capital goods industries. There's no need for America to risk a severe recession, when there is available such an easy and obvious preventive.



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